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1931

*Hand-Book of Fruit and
Ornamental*

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U. S. Department of Agriculture.

Trees, Shrubs and
Flowers



Karl Rosenfield 8.8

Grown and Sold by

STRAND'S NURSERY

GEORGE W. STRAND, Proprietor

TAYLOR'S FALLS, MINNESOTA

General Information

Where to Plant.—As a rule any well drained land suited to farm and garden crops will prove satisfactory for the general planting of trees and shrubs in the Northwest. The laying out of a grove or orchard, where a landscape gardener is not employed, should be done with care and it is always well to draw a complete diagram before planting is started. Many people have made the mistake of planting their outside groves or wind break too close to the buildings, making it impossible to get the best results from inside planting later on. If planting a wind break, be sure to go back far enough for orchard, garden and shrubbery to be planted inside without being crowded and to allow for a free and plentiful circulation of air on the inside. Fruit trees, being expected to grow and produce fruit at the same time, should be planted on land that is fairly rich and which has been well cultivated and drained. Where possible it is better to plant apple and plum orchards on a north or east slope. A southern slope is the least desirable owing to the fact that the sun brings the frost out of the ground earlier in the spring and freezing and thawing of the ground at the trunk is very liable to cause damage to the roots. However, where no other place is available this can be overcome by a heavy mulch as described later on.

How to Plant.—First be sure that the ground is well worked up and fertile. Unless a very few trees are to be set, it is much faster and also better to use a plow for planting. First mark out your rows the desired distance apart, and run the plow back and forth in the same furrow at least five or six times with a man riding on the beam, throwing the dirt out each way, and making the furrow as deep as possible. Trees can then be set in their place, packing sufficient fresh dirt firmly around the roots to sustain the tree in an upright position. Then with one horse, run the plow back and forth on each side of the row, throwing loose dirt back into the trench. After this is done, pack the dirt firmly around each tree. It is well to run these furrows one at a time and follow up with the planting, so that the dirt will not have a chance to be dried out by the sun and wind and will retain the natural moisture of the ground, which is very essential to trees. If necessary to plant in sod the ground should be loosened for a distance of from two to three feet from the tree each way according to the size. Dig the holes large enough to allow the roots to be laid in without bending and deep enough for the roots to be covered a few inches deeper than they were in the nursery row. If the trench where trees are heeled in is any distance from the place they are to be planted, it is well to uncover a few at a time and place them in a pail of mud. In that way they can be carried to the field and taken out one at a time without being exposed.

When to Plant.—In Minnesota and the Dakotas the proper time to plant trees or shrubs is in April or May, according to the season. Hardy perennials do well when planted in the fall but they also succeed well when planted in the spring. Tulips, Narcissi, Hyacinths and the Dutch bulbs can only be planted in the fall, generally in September or October.

Care of Nursery Stock.—It is safe to say that seventy-five per cent of the nursery stock that fails to grow, or does grow but is always stunted and weak, is due to improper handling after it is received by the customer. It cannot be impressed too strongly upon planters the necessity of keeping the roots from the sun or wind. When the stock is received, open the bundle in the shade out of the wind and if you are not ready to plant immediately, heel the roots in the ground, soaking them well as you do. If well heeled in they can be kept without damage for a reasonable time. However, the sooner trees are set in their permanent place after being opened the better.

Pack Dirt Firmly.—As the trees are placed in the hole with the roots carefully spread out, pull in the earth a little at a time and pack it firmly with the hands until there is enough to prevent bruising the roots when stamping it with the foot. Fill the hole up, packing the earth as firmly as possible as you go. Finish with a little loose dirt and allow the ground to slope toward the tree to collect moisture.

Pruning Is Essential.—Pruning is a very important matter and should be done with care and judgment. If too much wood is left above the ground the roots will not be able to supply it with moisture and the con-

sequences will be a serious set-back or possible failure. Use a sharp knife or pruning shears and cut away all bruised or broken roots. On fruit trees, the stems should now be put in condition for the formation of the top by removing all the limbs to the point where it is desired to have the top; then cut back each remaining limb, leaving from four to six buds of last season's growth. In the absence of any limbs suitable to form a top, cut the trees down to the requisite height, leaving the dormant buds to make the top. Pruning vigorously at time of setting is generally very distasteful to the planter, as it injures for a time the appearance of the tree to an unpracticed eye. It should, however, be unhesitatingly performed, all the branches to the extent of at least one-half the length of the previous year's growth being removed. Care should also be used to give the proper form to the tree. The head may be left high or low, as the taste of the planter may prefer, or as the nature of the tree in some cases may require. Large shade trees should be cut down to about two-thirds their height and all or nearly all of the branches removed, leaving the naked stem to form a new head. It is a good idea to wrap the lower half of the trees with burlap to protect them from sun scald until the branches are large enough to shade them. In the case of most bush fruits and ornamental shrubs the pruning should be even more severe, leaving but little above the ground. Evergreens are of a different nature and should not be pruned.

Should Be Mulched.—Mulching is also a very important matter and all young trees should be well mulched with hay or straw as soon as planted to retain the moisture in the ground around the trunk and also keep down weeds and grass. Never use fresh manure as a mulch as it is very liable to damage the tree.

Spraying Is Necessary.—Fruit trees and bushes, like other forms of life, cannot do their best while infected by disease or infested with insects. Spraying should be carefully and thoroughly done and at the proper time. On the opposite page we show a spray calendar that we have carefully worked out with the aid of entomologists and plant pathologists and which is deemed best suited to conditions in the central northwest.

To Eradicate Red Spider.—During the last few years Red Spider has attacked most varieties of Evergreens, and must be dealt with in order to save the trees. The Red Spider is a very small red bug that is hardly discernible with the naked eye; if it is taken in time, it will not injure the tree.

There are two methods to combat them, one is by the use of common glue to the extent of five pounds to fifty gallons of water, saturating the tree thoroughly with this solution. The Spider will become encased and will not do any more damage. A second application may be necessary but not often. In order to get the best results, it should be put on with a spray pump that has considerable pressure—200 lb. pressure is required if the best results are obtained, but if a person hasn't a spray pump, they can swish it on with a broom or window washer. The other is by the use of "Kolodust," a powder which can be blown on with a hand sprayer and kills the insects outright.

Protection Against Mice.—Protection by banking up the trunks of young trees about one foot, on the approach of winter is a good practice. It protects the graft and is sufficient barrier against mice, unless there is a deep fall of snow. This is not a very laborious matter, for about three spadesful of soil is enough for each tree. When there is danger of mice working under the snow, trod it down quite firmly around the trees. To guard against mice and rabbits when not otherwise protected, wash the stems with thin white wash thickened with copperas and sulphur. If this is washed off by rains renew the wash as often as necessary.

Varieties That Are Hardy.—As the bulk of our business is done in Northern States of the Mississippi Valley, it is to our interest to propagate only such varieties of trees, shrubs and plants as are best suited to the soil and climatic conditions of these states. In this book we are listing only such varieties as long experience and rigid tests have proven of value and the planter may feel safe in selecting any of them with a very few exceptions, which will be noted in the descriptions.

See Spray Bulletin on Inside Back Cover

Apples

Of all the fruits grown in the Northwest, the apple and the demand for them is constantly increasing, both for home use and for shipping. No city garden should be without sufficient apple trees to produce fruit for home use and the farm garden can easily be made to bring a handsome return for the amount of labor necessary by planting a few apple trees of the right variety. The following list will be an aid in making a selection.

SUMMER VARIETIES

Anoka—This bids fair to become the most popular of all the new apples. It was introduced in 1918 and in 1920 was named Anoka, a Sioux Indian word meaning "on both sides." The fruit is $2\frac{1}{2}$ inches in diameter, round, Duchess type of coloring, flesh white, good subacid, season September. It is an early and heavy bearer under propagation.

Duchess, Oldenburg—A large beautiful apple streaked red on yellow, tender and juicy. Fine for cooking, very productive. Ripens early in September.

Erickson—Originated at Aitkin, Minnesota, and pronounced by leading Horticulturists as the hardiest variety known to the apple family. Exceedingly large, of splendid flavor, solid bright red color when ripe. A hearty bearer, keeps until December. Recommended for planting where other varieties freeze out.

Yellow Transparent—Medium size, white changing to lemon yellow, smooth waxy surface, of good quality with crisp flesh. Keeps well for an early apple. Ripens in August.

FALL VARIETIES

Anisim—Hardy and remarkably free from blight, fruit small, somewhat rough, but of rich red color, tender and juicy, fine for eating or cooking. Season September to January.

Folwell—This is a Minnesota product and derives its name from the first president of the University of Minnesota. The tree is hardy, large, and spreading. Very vigorous, and regularly productive. Fruit is large, round, and of a greenish yellow color with heavy blush. Flesh is medium fine grained, firm, tender, and juicy. Keeps until late in the fall.

Hibernal—One of the hardiest apples grown. Fruit large, handsomely striped, fine for cooking and for pies. Perfectly hardy up to the Canadian line. Best for top working to winter sorts. Season September to November.

Okabena—Extremely hardy and free from blight, prolific bearer. Fruit large, strongly resembling the Duchess but keeps much better. Season September and October.

Pattens Greening—Tree extremely hardy. Productive and an early bearer. Fruit large, green when picked changing to yellow. Fair for eating and excellent for cooking. Season September to December.

Wolf River—An iron-clad that was originated near Wolf River, Wisconsin. Fruit is extremely large, greenish yellow, turning to crimson on top, tender and juicy. Season September to December.

WINTER VARIETIES

Delicious—Originated in Iowa and is not considered hardy north of the Iowa-Minnesota line. Fruit is round, long, tapering, deep red running to yellow at the tip. Has a delightful flavor and has been kept in cold storage until May. Valuable for home or commercial orchards.

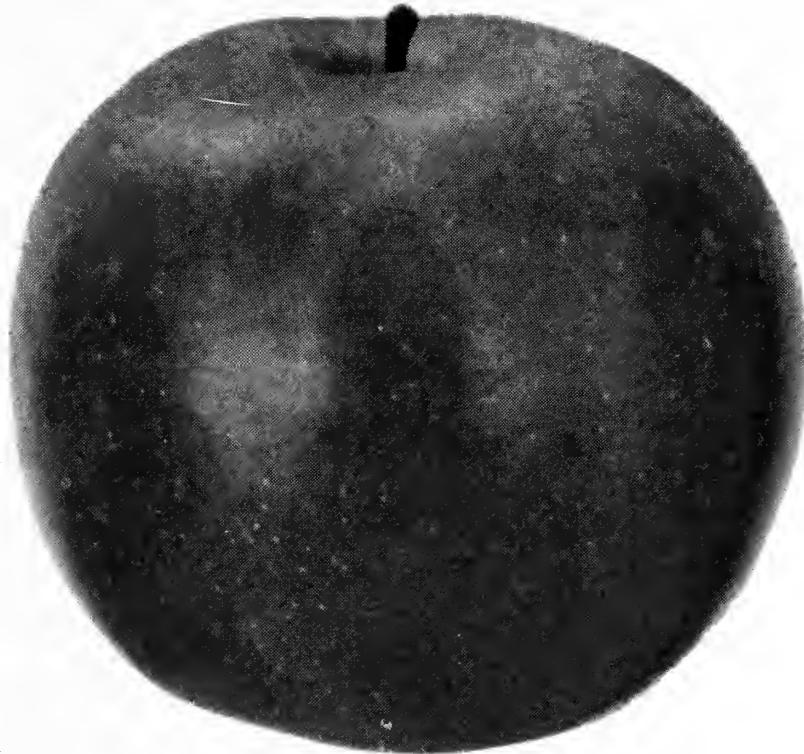
Haralson—Best new keeper, originated at Minnesota Fruit Breeding Farm. An early bearing variety with a tree of moderate size, roundish, well colored with an even red over the entire surface, flesh fine grained, tender, juicy, sub-acid, quality good. Keeps in common storage until early spring.

McIntosh—Tree vigorous with spreading head, a good annual bearer. Fruit above medium size, smooth, yellow covered with crimson, flesh snow white, crisp, very tender, aromatic and sub-acid. Season October to January.

Minnehaha—This apple is the first produced at the Minnesota station to receive a name. It is a beautiful dark red apple somewhat flattened in form, and is at its best in early winter. Medium in size, flesh firm and fine grained, medium, juicy, rich flavor, quality very good. The tree is hardy, vigorous and productive.

Malinda—An irregular but steady grower of about the same hardness as the Wealthy. Fruit medium, green, with blush of red. Flesh hard, good grained, sub-acid, good flavor. Season October to March.

Northwest Greening—Tree of Wisconsin origin, vigorous and hardy. Fruit large, nearly round, of greenish yellow color, flesh yellow, fine grained and firm, sub-acid, smooth and attractive. Season December to May.



HARALSON APPLE

Wealthy—Fruit large, red, regular and of the very best quality. Tree vigorous and thoroughly hardy and bears very young. A good market variety. Season October to February.

Goodhue (No. 121)—A splendid mid-winter apple resembling the Wealthy, but larger and apparently a much more hardy and vigorous tree. Fruit rich red color, delicious flavor and hangs well on the tree until fully ripe. Not much subject to blight. Keeps until February.

Rhoda (No. 54)—A recent but wonderful addition to our "Perkins Family," and when we consider hardness the Rhoda is by far the best in the Perkins list. Fruit has a distinctive appearance being particularly oblong in shape, medium size, striped to deep red in color. Flesh firm, fine grained and sweet. Tree hardy and does not appear to be subject to blight. Keeps until April.

Perkins (No. 72)—We firmly believe that this apple far surpasses anything that has yet been produced as a winter variety for Southern Minnesota, Southern Wisconsin, Iowa, Nebraska and South Dakota. This apple has been kept under favorable conditions for one year and then exhibited at the Minnesota State Fair. The fruit, which resembles the Baldwin very much, is large, rich red, round as a ball and though very hard at picking time it becomes fine for eating during the middle or late winter. It is almost impossible to shake the apples from the tree until thoroughly ripe. The tree is a rapid, robust grower, free from blight and has proven perfectly hardy wherever it has been planted. Keeps well into May or June.

CRAB APPLES

Dolgo—A new, red-jellied Siberian Crab. This crab was brought from Russia to the South Dakota Experiment Station in 1897 and introduced in 1917. A vigorous, productive tree and exceedingly free from blight. Fruit full of juice, jells easily, makes a rich, ruby-red jelly of beautiful color and excellent flavor. The tree is a strong and sturdy grower and is winning favor in many localities.

Early Strawberry—Tree very vigorous and productive, flesh juicy, rich, sub-acid, with an agreeable flavor. August.

Florence—One of the hardiest of all and an early and profuse bearer. Fruit larger and considered by

some superior to the Transcendant. August to September.

Hyslop—This variety has been long and extensively cultivated. Trees are hardy and strong, fruit large, deep red when ripe, produced in clusters. Fine for cooking and for cider. September and October.

Minnesota—A medium grower, hardy, best of the winter varieties for size and keeping qualities. The fruit is large and yellow, splashed with red on sunny side, fine grained, juicy, and of an excellent flavor.

Transcendant—An old favorite and a beautiful variety of the Siberian Crab. Red and yellow. Quite

subject to blight. Not recommended on that account. August.

Virginia—A fine grower, free from blight. Fruit size of Transcendant, color red. Fine for cooking and for cider. September and October.

Whitney—Very hardy, productive, handsome foliage. A dessert apple of good quality. Color red, flesh juicy, tender and rich. Comes into bearing very early. September.

Yellow Siberian—Fruit medium size. Clear pale yellow. An excellent crab for preserves and pickles. Tree very hardy, healthy, comes into bearing very young. September and October.

Plums

The plum is the natural tree fruit of the North. No farm or village home even in North Dakota and Montana need be without this luscious fruit which is as easily raised in this climate as oranges in Florida or peaches in New Jersey. They begin bearing early, often the next year after planting and continue so abundantly that they bear themselves out in ten to fifteen years. The native plums of this section were small and not always of the best flavor but during the last twenty-five years horticulturists have by experimenting and cross fertilization with Japanese and European plums brought forth new and improved varieties that are equal in size and superior in flavor to the choicest California plums usually found in fruit stores.

When planted alone, or not used as filler in the orchard, plums should be planted about sixteen feet apart. Several varieties should be planted together in order to allow the blossoms to cross pollinate. Trim back to form a head about three feet from the ground and each year cut back the rank growth of the branches before they reach the size of a lead pencil. Suckers that shoot up from the roots should be kept cut away and the ground kept well mulched and cultivated. Spraying should not be neglected and should be thoroughly and effectively done at least twice each year. Should they set fruit too heavy to ripen easily shake off the excess when it is about the size of a wild cherry. This will prevent overtaxing the vitality of the tree and insure a uniform crop each year.

AMERICANA PLUMS

De Sota—Fruit medium size, yellow with red cheek, fine for eating or canning. Fresh, yellow and rich. Moderate growth, bears young and profusely. Hardy and very desirable.

Surprise—A fine native variety considered by many as one of the best of the cultivated varieties. Tree large, healthy grower and of the hardiest type. Fruit large, medium thick tender skin, bright red; flesh pale yellow, mealy, of fine flavor and good quality.

Terry—This plum has also been known as "Free Silver." Fruit round, red, of medium size; flesh yellow, firm and of fine flavor. Perfectly hardy in all sections of the Northwest.

Burwood—A variety of recent origin which promises to become extremely popular among Northwest planters. Supposed to be a cross between the Burbank and Brittlewood. Fruit is very large and of excellent flavor. Meat solid, juicy and with small pit. Tree a rapid grower and perfectly hardy.

Omaha—A new variety, very large, fine for eating or canning. In size, texture and flavor resembles the Burbank. Meets with ready sale on the market. Meat solid, small pit. Tree very hardy and a rapid grower.

HANSEN HYBRID PLUMS

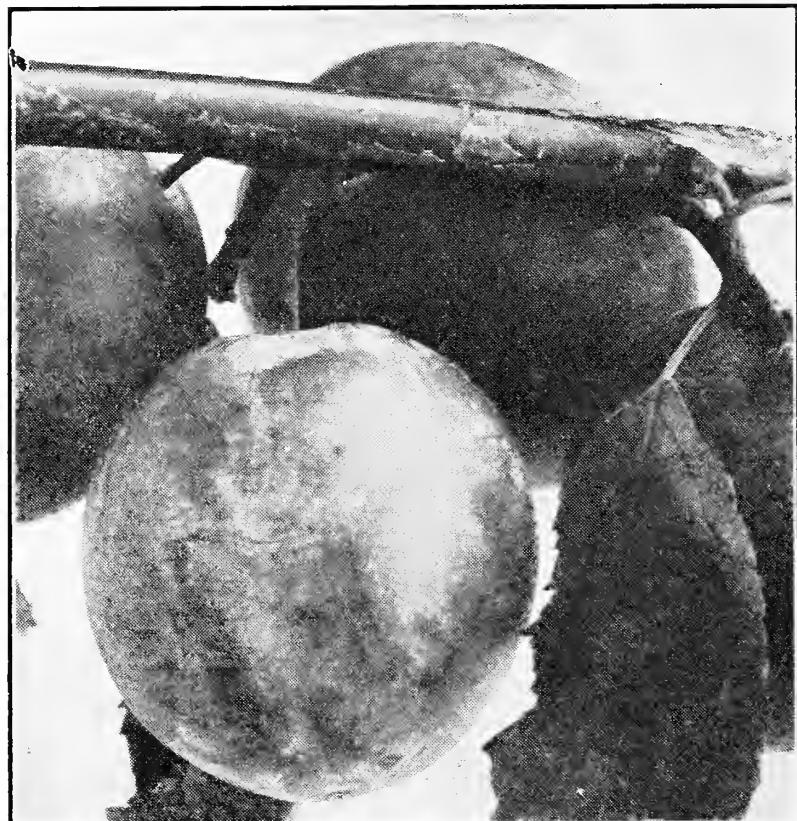
Produced at the South Dakota Experiment Station

Hanska—A cross between the native plum and the fine fragrant Apricot Plum of China. Tree a strong upright grower and early and full bearer. Fruit large, firm, bright red; flesh yellow and of a delicious apricot flavor. Excellent for eating raw or for cooking.

Kahinta—Cross between the Japanese Apple Plum and the Terry. Fruit $1\frac{1}{2}$ inches in diameter, dark red, roundish, slightly oval, freestone, skin thin, flesh firm, yellow and sweet, and of excellent quality. Pit very small. Bears young and very heavy.

Opata—A cross between the Sand Cherry and the Japanese Gold plum. Tree very hardy, spreading grower and heavy bearer. Fruit a little larger than the wild plum; deep purplish red splashed with green; flesh deep green, firm, and of excellent quality, small pit.

Sapa—A cross between the Sand Cherry and the Japanese Sultan plum. Tree somewhat dwarf, rapid grower. Fruit small dark purplish red splashed with green; flesh and juice of a rich dark purple and of a rich flavor, small pit; excellent for canning and for sauce and pies.



KAHINTA PLUM

Toka—This plum is of the same parentage as the Hanska and is very similar in many respects. The tree is exceedingly erect, strong, stocky, and hardy. Fruit is bright red with blue bloom; flesh yellow, firm, of good quality, rich and fragrant.

Waneta—A cross between the Terry and the Apple Plum, a large Japanese variety. The fruit is large, often reaching two inches in diameter. Fruit of a deep red, yellow flesh and a delicious flavor. Tree is perfectly hardy and a rapid grower.

MINNESOTA PLUMS

Produced at the Minnesota Fruit Breeding Farm

Golden Rod—Originated in 1913, and distributed in 1923. A distinct departure from the usual type of red plum, its color being clear yellow, size large, very attractive. Because of its contrast to other plums, its firmness and good shipping qualities it is a good commercial variety.

La Crescent—The tree is large, extremely vigorous in nursery and orchard. Fruit is medium in size, skin thin, tender, easily removed. No trace of astringency; color, a beautiful clear apricot yellow, sometimes faintly blushed and covered with a delicate bloom; flesh is yellow, juicy, very tender, not fibrous, sweet, aromatic, suggestive of apricots; quality of the highest; pit small and free. Season early.

Loring Prize—This variety was originated near Faribault, Minnesota, and succeeded in carrying off

the prize offered by the State Horticultural Society for the best Minnesota plum. Tree is thrifty and perfectly hardy. Fruit very large, from $1\frac{3}{4}$ to $2\frac{1}{4}$ inches in diameter, nearly free stone, bright red, flesh yellow and of a delicious flavor superior to the California plum. Fine for market purposes. Tree bears when three to four years old.

Monitor—Tree medium in size but vigorous, produces a compact, rounded, well-shaped head, hardy and productive; fruit is large, roundish, well colored, with dark, dull red; flesh firm, moderately juicy, sweet; quality good; stone medium in size, cling; late mid-season. Very promising as a market plum.

Radison—Tree is an upright and spreading grower of moderate height. Fruit is large, rich attractive red, overlaid by medium bloom; flesh firm, rich yellow, medium fine grained, tender, juicy and sweet. Fruit matures well together permitting harvesting at one picking.

Red Wing—Tree is moderately vigorous, upright spreading, quite hardy; fruit very large, firm, yellow overlaid with bright red; flesh moderately juicy, sweet; quality very good; stone medium to large in size, entirely free; mid-season. An excellent variety for home use and an attractive market plum.

Tonka—Tree of medium size and vigor, of upright spreading growth, hardy; fruit roundish, large, dark red; flesh firm juicy, sweet; quality good; stone very spreading growth, hardy; fruit roundish, large, dark small, free or nearly free at maturity; early mid-season. Especially recommended for the home and market because of Minnesota fruit breeding farm productions.

Underwood—Tree extremely vigorous, large size, of spreading growth, forming a round head, very hardy and very productive; fruit is large, roundish-oval, attractive red in color; flesh juicy, fairly firm, hangs well to the tree, ripens very early and continues over a long season; stone is small, cling; quality excellent.



RED WING PLUM

Cherries



ZUMBRA CHERRY

Cherries are being grown more and more throughout the Northwest. While the eastern varieties have not proven very successful in this section, particularly the sweet cherries, there has in the last few years,

been considerable advancement in the production of hardy kinds. By cross breeding, horticulturists have brought out some new varieties that are particularly adapted to this section and with fruit of a quality that compares very favorably with the older sorts. Cherries should be given the same care as plums and it is best to keep them trimmed to bush form as much as possible.

Compass Cherry—Originated in Minnesota. A cross between the Rocky Mountain Cherry and the Native Plum, and resembles both. The most remarkable fruit of recent origination. Hardy as any wild plum. Sweet, juicy and excellent flavor. Marvelously prolific bearer. Grows on any soil. Fruits every year—never misses. Bears second year after planting. Good shipper and a fine cooker. This cherry is perfectly hardy in Minnesota, Wisconsin, Iowa, the Dakotas and Montana.

Early Richmond—Everywhere the most popular. Tree strong, thrifty grower, making a large, symmetrical head; fruit medium size, dark red and juicy; slightly acid flavor and especially valuable for cooking purposes; tree an early and abundant bearer.

Nicollet Cherry—The Nicollet is the nearest approach to the true sour cherry, that has been produced in the northwest. The tree is small, bush-like, finely branched, leaves small, one year shoots conspicuously reddish, hardy except in northern portions, fruit is small, roundish, oval. Skin thin, medium tough, color dull cherry red, flesh greenish yellow, tender, juicy, mildly sour, cherry like in flavor and texture, quality good. Stones small, roundish oval, cherry like. Season August.

* **Zumbra Cherry**—A low growing tree, vigorous and very productive, showing the characteristic profuse bearing habits of the sand cherry crosses. The fruit reaches one inch in diameter and is borne in thick, rope-like clusters along the slender branches of last year's wood. Color very dark, nearly black when ripe; flesh firm, greenish, sometimes tinged with red when fully matured; stone small, free; quality good with a flavor resembling its sweet cherry parent. This cherry is destined to surpass all other productions for cherry growing in Minnesota, the Dakotas and Wisconsin. One of the most promising of the Minnesota Fruit Breeding Farm productions.

Pears

Mendel—The hardiest pear of good quality yet produced. Blight proof, and disease free, heavy bearing, sweet and very juicy. Originated at New Ulm, Minnesota. The Mendel pear makes possible profitable commercial pear orchards in favorable portions of the northwest.

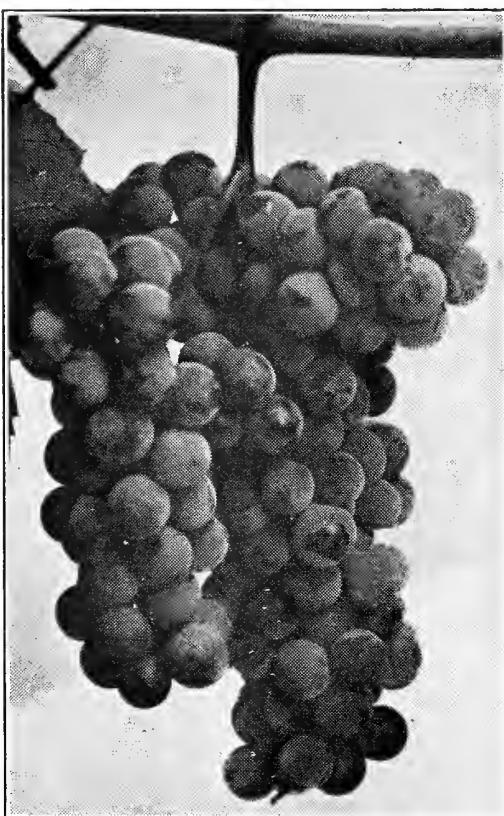
Patten—The tree is distinctly upright in habit, with large, healthy foliage. The blossoms are large handsome white. Fruit when well grown, is medium to large size, favors Bartlett in general form, smooth and regular; color green, turning to yellow as it

ripens. The skin is quite thick but becomes quite thin and tender as it ripens. The flesh is very tender, juicy, rich sub-acid, refreshing and very good quality. The tree is not considered entirely blight-proof in northern localities. Season, September.

Minnesota No. 1—Tree is large, vigorous and free growing but not hardy enough for northern location. The fruit is medium to large, roundish, yellow with distinct blush. Flesh tender, medium fine grained, almost melting, juicy, sweet, pleasant, quality very good. Season late September.

Grapes

It is only recently that grapes have received any particular attention in the Northwest and it is very doubtful if any fruit has made more rapid strides in this section than the grape. Many can remember



BETA GRAPE

when the cultivated grape was almost unknown here, likely because of the fact that Eastern grapes could be bought upon the market in their season for from ten to twenty cents a basket, while today the baskets

alone cost nearly that amount. Today this is all changed. The Eastern and Western grape has advanced in price until it has almost become a luxury and in its place has been brought fruit of native origin that is equal in every respect to those of former years. They should be planted in good rich soil in a sunny location and cut back to six inches from the ground at planting time. It must be remembered that grapes bear on new wood only and should be cut back about two-thirds of the year's growth after the leaves fall each year. A three wire fence is perhaps the most satisfactory trellis on which to train them, but the posts should not be more than a rod apart in order to furnish sufficient support for the heavy new growth each year. Set plants eight feet apart in the row and rows eight feet apart. Many of the varieties we are listing are the product of the Minnesota Fruit Breeding Farm, where they have been given the most rigid tests.

Alpha—A recent production somewhat like the Beta but considered by some to be superior. Fruit a trifle smaller than the Concord and sub-acid. Perfectly hardy in all sections.

Beta—A northern seedling crossed with the wild grape which has proven entirely hardy in North Dakota without winter covering. Fruit of medium size and of a flavor midway between the Concord and the native wild grape. Ripens early and is seldom affected by late spring frosts.

Concord—An old standard variety and the most popular grape in America. Fruit large, round, sweet and borne in huge clusters. Vines hardy and vigorous.

Dakota—A product of the Minnesota Fruit Breeding Farm that has become well established throughout the Northwest. Fruit large, slightly sub-acid and borne regularly in large clusters. Very hardy.

Moore's Early—Ranks next to the Concord for both home planting and commercial vineyards. Less vigorous and fruitful than the Concord but earlier and somewhat better quality.

Suelter—A new Minnesota production, somewhat resembling the Alpha and Beta in size and color. Has proven a wonderful addition to the Northwest varieties. Has a fine flavor and good shipping and keeping qualities. Bears early and very heavy when given proper pruning and care.

Gooseberries

There is probably no small fruit grown in the gardens of the Northwest that produces so abundantly every year with so little care as the Gooseberry. They do well on any soil that is suited to wheat or potatoes and there is always a good market for the fruit. Cut back same as currants and set from three to four feet apart in the rows and the rows four feet apart to allow for cultivation. Spray thoroughly as soon as the leaves are out and again when the fruit is set (see spray program). Gooseberries, like currants, bear on both old and new wood, but all wood three years old should be kept trimmed out as the fruit of the younger wood is larger. Keep cultivated and mulched during the summer.

Carrie—Of Minnesota origin. Fruit pale red, of good size and excellent quality. Bushes quite free

from thorns, very thrifty; and not much subject to rust or mildew.

Champion—An Oregon seedling. Fruit large and of good quality. Very productive. Hardy and well adapted to this section.

Downing—This is perhaps the most popular gooseberry on the market, though not quite as hardy as some. Fruit light green, sweet and fine, large in size.

Houghton—Pale red when fully ripe. Thin skin of the best quality for canning and pies. Bears abundantly and is perfectly hardy anywhere.

Red Jacket—Larger than the Houghton, its parent. Vigorous, productive, red when fully ripe. Fine for preserves and for table use. Entirely hardy.

Every home should have an assortment of small fruits for the table and for canning

Currants

No farm or city garden should be without currants. They can be planted along the edge of the garden or between apple and plum trees. They are fine for sauce and pies and make excellent jelly. They need only ordinary care. When planting cut back severely and set them three to four feet apart in the row and the rows four feet apart. Mulch with well rotted manure and spray each year as soon as the leaves are out and again when the fruit is set. After the fruit is picked, cut out all wood that is three years old. This will allow for a greater growth of new wood for the following year.

Perfection—An unusually large red berry borne in good sized bunches. Fine for table use and for marketing.

Cherry—A large red berry in medium sized bunches. Modest grower and does better where it has partial shade.

Fay's Prolific—One of the best known and universally used by large fruit growers. Plants are hardy and productive and fruit is of fine flavor.

Pomona—A choice red currant for both market and home use. Large berries full bunches of good size, sweet and fine quality.

London Market—Bush vigorous, upright, fruit medium to large, color dark red, sprightly acid flavor, very productive.

X Stewart—A fine red currant somewhat resembling the London Market only the fruit is larger and the plants stronger. The quality of the fruit is very good. Perfectly hardy throughout the Northwest.

North Star—Both berry and bunch are very large. Fruit very sweet, rich and firm. Good market currant.

White Transparent—One of the very best white currants. Fruit large, sweet and firm, borne on heavy long clusters. Bushes are prolific and remarkably free from disease. Make excellent pies and sauce.

Wilder—One of the best varieties grown. Superior in every way to the common sorts. Branches and berries large, color red, splendid quality.

Raspberries

The Raspberry is one of the best small fruits for the Northwest and can be grown almost anywhere without any great amount of care. It is one of the most palatable of all fruits with practically no waste or extra work in canning, and produces good crops every year. There is always a good demand for Raspberries and the prices are always high. Plant either in rows six feet apart and three feet apart in the row or in hills four to five feet apart. Care should be taken not to plant too deep; cover the bud and roots with about one inch of dirt. Cut the canes down to about six inches at planting time and as the new shoots come up pinch the tops back when about two feet high to make them stalky. Raspberries bear on new wood and after picking time all old canes should be cut out. Cultivate only enough to keep the weeds down and only shallow as the roots grow near the surface and are easily injured. Mulching with well rotted manure always pays. Spray just before buds open with lime sulphur or Bordeaux Mixture. All red raspberries sprout from the root.

RED RASPBERRIES

Cuthbert—Fruit large, bright red. Hardy but needs winter protection. Fine for market and home use.

King—A good standard variety that has given universal satisfaction. Berry is large, firm, bright red and a good market sort.

Latham—The plants are hardy, unusually vigorous and productive, strong plant producers; canes robust, tall, nearly thornless, reddish with heavy bloom. The fruit is large, frequently an inch in diameter, berries frequently double in early pickings, broad, roundish; color bright attractive red; very firm, medium juicy, medium sweet, quality good to very good. Season medium to late, fruits ripen over a long period. Latham is the name given to the raspberry that was originally known as Minn. No. 4.

Ohta—An everbearing variety that bears well the first year. Of good quality and fruits during a long period.

Sunbeam—This has proven perfectly hardy without winter protection. Fruit large and of good quality. Fine for canning.



LATHAM RED RASPBERRY

PURPLE CAP RASPBERRIES

Cumberland—Berries large and even in size, bears abundantly and ripens mid-season. Strong grower and one of the hardiest.

Columbian—Plant a giant in growth, very hardy. Fruit large, dark red, rich juicy and delicious flavor, does not drop from bush. Does not sprout from roots.

BLACK RASPBERRIES

Gregg—Of good size, fine quality, productive and hardy, firm, sweet and rich. Strong grower and good bearer. Ripens late and evenly and is a good market berry.

Kansas—One of the best black caps. Large, round, firm, moderately juicy, strong grower and very productive; ripens early; considered one of the best market berries on account of handsome appearance.

Older—One of the lately introduced varieties which has been receiving considerable attention in the Northwest. Ripens a trifle earlier than the Gregg. Hardy and reliable. Does not sprout from roots.

All our Raspberries are free from Mosaic and other injurious diseases—Strong and healthy

Blackberries

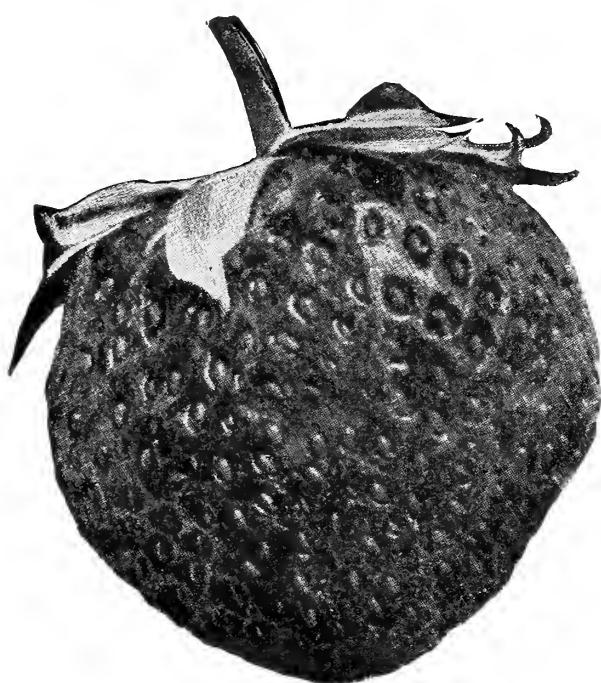
Blackberries are a wonderful fruit and help to fill the gap between raspberries and grapes. They are easy to grow, requiring about the same culture and care as Raspberries and succeed on most any well drained soil. All Blackberries sprout from the roots. Fruit is large, firm and fine for canning and pies. Blackberries should be covered in winter. Remove a spadeful of earth from the side of the plant, bend at the root and cover the entire plant with about two inches of dirt.

Ancient Britton—A remarkable market variety of medium size and best quality. Very hardy and berries sweet.

Snider—Medium size without hard, sour core. Not as thorny as other varieties. Extremely hardy and very productive. Ripens in good season.

Stone's Hardy—A vigorous grower. Berry glossy black and of good flavor. A little later than the Snyder.

Strawberries



MASTODON STRAWBERRY

Everybody likes strawberries and there is no reason why anyone with even a small city lot cannot have an abundant supply for the table throughout the summer season. There is no fruit that produces so well for the small amount of ground required and the little care necessary. As a commercial enterprise they are also very profitable as there is never enough strawberries on the market to supply the demand and the price is always good. An acre of strawberries can easily be made to produce a net profit of five hundred dollars after it comes into full bearing. Strawberries succeed well in any soil that is adapted to ordinary farm or garden crops. Soil should be thoroughly prepared, well drained and enriched. For field culture set the rows three and one-half to four feet apart and fifteen to eighteen inches apart in the row. For garden the rows may be set closer. To produce fine berries do not allow the rows to become too heavily matted. Pinch off the runners as soon as they get out about a foot from the row, leaving plenty of room for cultivation and mulch. After the ground is frozen in the fall cover the plants with two or three inches of clean straw and this mulch should be raked off and left between the rows early in the spring. Care should be taken not to plant strawberries too deep nor too shallow, but so that the bud at the base of the leaves will be even with the surface of the soil. June bearing varieties should not be allowed to fruit the first year but with the Everbearing varieties if the blossoms are kept pinched off until the first of August they may be allowed to bear a crop in the fall.

JUNE BEARING VARIETIES

Beaver—This variety was originated by C. H. Beaver, Eau Claire, Wisconsin, and is a cross of Dr. Burrill and Premier. Is a perfect blossom plant, with dark green foliage, very strong and vigorous, good runner maker and drought resister. The berries are large and of a deep glossy red which extends over the entire berry to the heart of the fruit. Is very productive, hardy and frost resistant in both bud and blossom. The fruit is very firm and of such texture that it does not require picking more than twice a week.

Minnehaha—Plants are very vigorous, hardy, and productive, form freely, but do not overcrowd in a row.

Flowers are large, perfect, borne on stout, upright stems that hold the heavy fruits free from the ground. The fruit is very large, inclined to be wedge shaped, color medium red, seeds raised, yellow, appearance attractive, flesh very firm, light red to whitish, fine grained, juicy, somewhat tart. Quality good. Season late.

Premier—One of the most productive and best well tested early varieties. Fruit highly colored, firm, a splendid shipper, of superb quality. Strong, clean foliage, plant grows and spreads over its loads of fruit, protecting it from sunscald and rot.

Senator Dunlap—An old standard variety that has been the leader for many years. Rampant runner, should be restricted in production of plants. Fruit good size, regular form, beautiful bright red, glossy, firm, splendid keeper and shipper, excellent quality. One of the best for canning.

FALL OR EVERBEARING VARIETIES

Champion—A wonderful new variety claimed by many to be superior to the Progressive. In Michigan, where they were originated, they have been planted extensively with entire success. A heavy producer and good plant maker. Fruit is of excellent quality.

Duluth—Entirely hardy in central and northern Minnesota and in Canada, a fair plant maker and produces heavily both spring and fall when grown in the hill system. Foliage heavy, leaves medium size, dark green, covering and partially protecting the blossoms. Flowers perfect and medium in size, conical, dark red, with seeds slightly raised and red when fully ripe; flesh red, moderately juicy, fairly firm, slightly sub-acid; aromatic; of good quality. Spring crop late.

Mastodon—There is no question but what the Mastodon is the largest berry ever produced, and they are just as highly flavored and sweet as they are big. This variety was introduced in Indiana but a few years ago and in a very short time, has thoroughly proven its superiority over all other varieties. Ripe berries may be picked in about three months after plants are set, and they continue bearing wonderful large juicy fruit until freezing time. The second year they bear a crop in June and July and after a six weeks rest, commence bearing again and continue until winter sets in. The fruit is very firm and can be shipped to market without becoming soft and unsalable. No home garden should be without a quantity of these wonderful strawberries.

Progressive—The standard by which all everbearing sorts are measured. Healthy, vigorous and productive. Stands hot and dry weather better than most sorts. Fruit deep red, medium size. Very high quality.

Plan Before You Plant



Miscellaneous

Asparagus—Can be planted either in spring or fall. Dig a narrow trench at least ten inches deep and fill the bottom with three inches of well rotted manure. Cover this with two inches of black soil in which plant the Asparagus. Cover with two more inches of dirt and leave balance of trench open until the plants grow out. Set plants one foot apart and rows two to three feet apart. Give a good top dressing of manure in fall, working it in between the rows in spring. Liberal applications of salt are also beneficial. We grow

Washington Rust Proof, and Conover's Colossal, which we consider the best.

Horse Radish—Too well known to need description. Grows anywhere. We offer strong roots which should be planted in the spring.

Rhubarb—Easiest culture. Just what we need in spring for pies and sauce to thin our blood. A great medicine. We grow two kinds, Victoria, with tall, coarse, pink colored stems, and Linneaus, called wine plant, with smaller stalks, more tender and very fine quality. Both entirely hardy.

Hardy Perennials

One of the essentials in securing a bright and lovely garden or border is color, and to get this you need perennials. Most of the shrub planting is to secure foliage, the quiet green against the house foundation or along the border lines. In order to secure a succession of color from spring until fall liberal use should be made of perennials. Their range of height, foliage, color and time of blooming is so varied that they are really indispensable. The perennial is a plant with a hardy root system which lives in the ground from year to year while the top dies back in the late fall. They thrive best in moderately rich soil not too wet. It is well to cultivate deep in the preparation of the ground so that the root growth will extend far below the surface and eliminate the need of watering. After the ground has frozen a few inches they should be mulched with leaves, straw, coarse manure or clean litter of any kind and this should be left on for a time in the spring to prevent freezing and thawing, which is very injurious to the young shoots. After the danger of frost has passed it can be raked from the plant and worked into the soil or left on top as a mulch to conserve the moisture. In selecting perennials care should be exercised to provide, not only a liberal contrast in the color scheme, but also a succession of bloom from spring until fall. The following list covers a range sufficient for all purposes.

Achillea, The Pearl—Pure white double flowers borne freely in clusters. Very effective to soften conflicting notes in the color scheme. 15 to 24 inches. All summer.

Anchusa, Dropmore—Tall spikes of beautiful purple flowers, flowering all summer. Rough broad foliage. 4 to 5 feet. June to September.

Baby's Breath, Gypsophilla—Dense spreading symmetrical foliage covered with minute white flowers having a beautiful gauze-like appearance. 2 to 3 feet. July and August.

Baptisia, Australis—The attractive blue pea-shaped flowers are borne in short spikes. Will stand partial shade. 2 to 3 feet. May and June.

Bleeding Heart—Have long racemes of pink flowers which are always attractive. Come up early in the spring and flowers immediately. 2 feet. May to July.

Canterbury Bell, Campanula—An old favorite with beautiful bell flowers in pinnacles, blue to white. Protect heavily in winter. 18 to 24 inches. June and July.

Chinese Lantern Plant—A unique and very interesting novelty. Grown for the highly colored bladder-like fruits, or seed pods which cover the bush in late summer and autumn. These fruits average about 2 inches in diameter and are a brilliant orange-red when ripe, and because of their shape and texture, the bush is properly called "Chinese Lantern Plant." The branches when dried, make beautiful winter decorations, retaining their brilliant color a long time.

Columbine, Coerulea—They come in assorted colors of blues, whites, yellows, pinks and rose. Grow in almost any soil but prefer well drained sandy loam. 12 inches. April to July.

Coreopsis, Lancolata—An improved variety with large bright yellow flowers, one of the best hardy plants. Fine for cut flowers. 20 inches. June to October.

Dianthus Plumarius—The hardy pinks have a spicy fragrance without which the garden is incomplete. Their perfect form and rich coloring make them great favorites for summer bouquets. 10 inches. June.

Echinacea—A very hardy plant, coarse foliage of dark green. Rose colored petals with dark colored raised cone in center. 3 feet. June and July.

Flax Perennial—A new perennial resembling somewhat the field flax when in bloom. Blossoms of a light blue which can be increased by clipping the heads as the flowers die. 15 inches. May to October.

Fox Glove, Digitalis—A biennial which under proper conditions will seed itself. Very attractive in the border. Sold only in assorted colors but are mixed from the best plants. 2 to 3 feet. June to July.

Giant Daisy, Pyrethrum—A hardy tall growing plant throwing out long stems which bear clusters of pure white flowers with yellow centers. Blooms late in the summer and continues until frost.

Gaillardia, Grandiflora—The flowers are of gorgeous coloring. The center is of dark red-brown, while the petals are marked with brilliant crimson, orange and vermillion and often a combination of all in one flower. 15 inches. All summer.

Golden Glow, Rudbeckia—Has wide and striking range of foliage and an abundance of double yellow-golden flowers, shaped like a cactus dahlia. 5 to 6 feet. July and August.

Helenium, Dutumn—Late bloomer. Flowers of a rich deep cream, foliage dark green. Similar to the Riverton Gem except in color. 2 to 3 feet.



Helenium, Riverton Gem—Bloom in late summer and fall when plants, about two feet high, are covered with old gold flowers suffused with bright terra-cotta changing to red.

Hibiscus, Mallow Marvels—A robust type of upright habit, producing an abundance of flowers of enormous size in all the richest shades of crimson, pink and white mixed colors. 4 to 5 feet. August and September.

Hollyhocks—These stately majestic plants are as old as the country, but the double sorts are not so well known. We have them in double pink, double white, double cream, also assorted colors in both double and single. 6 to 8 feet. June to September.

Larkspur, Delphinium Belladonna—Most continuous bloomers of all Larkspurs, with delicate, clear turquoise blue flowers. 18 inches. June and July.

Larkspur, Chinese—A dwarf variety with fine feathery foliage and deep gentian blue flowers. 2 feet. July and August.

Perennial Sweet Pea, Lathyrus—An exceedingly hardy and interesting plant adapted for wild tangles or rookery work—never in the border. The flowers

are clustered, of assorted colors, very odorous and borne profusely. Fine for a trellis or fence. June to September.

Hardy Narcissus—A beautiful perennial of strong growth, dark green foliage. Flowers profusely of a rich white color. 15 inches. May.

Lily-of-the-Valley, Majalis—The daintiest and most lovable of all garden herbs. Flowers pure waxy white and in graceful drooping racemes. 6 inches. May.

Monarda, Didyma—Second only to the Cardinal Flower in the intensity of its crimson flowers. Rather coarse and aromatic. Most effective at a distance. 20 to 30 inches. June to August.

Physostegia, Virginiana—Used for border with striking effect. Flowers one inch long in white, rose and purple. 2 to 3 feet. July and August.

Physalis, Franchette—An ornamental variety of the Winter Cherry, forming dense bushes about two feet high, producing freely its bright orange-scarlet lantern-like fruits, which when cut will last all winter.

Platycodon, Grandiflora—Old fashioned flowers of the garden, very regular in growth and habit. Large showy deep blue flowers. 18 inches. June to October.

Poppy, Orientalis—Enormous fiery red flowers six to eight inches across with a satiny crimped texture and peculiar hairy stems. Effective for use with shrubbery. 2 to 3 feet. May to July.

Pyrethrum, Hybrid Single—Flowers are variegated

and are borne on long stems, most convenient for decoration. May and June.

Sedum, Spectabilis—One of the prettiest erect growing species, attaining a height of eighteen inches, with broad, light green foliage and immense heads of showy rose colored flowers. August to October.

Shasta Daisy, Medium—A practical creation of Luther Burbank that is deserving of greater use. Flowers of pure glistening white, adapts itself to any soil or location. Excellent for cut flowers. 18 inches. June to September.

Sweet William, Barbatus—One of the best and most satisfactory of the old fashioned plants. We furnish them in assorted colors of an endless variety. 15 inches. June and July.

Thousand-to-One-Aster, Boltonia—A hardy native perennial that has been propagated for years. Large aster-like flowers of pink, slightly tinged with lavender. 4 to 5 feet. June to September.

Veronica, Longifolia—One of the handsomest blue flowering plants. Spikes completely studded with blue flowers. Fine for cutting and one of the best plants for the hardy border. 2 feet. July to September.

Yucca, Filamentosa—A very striking plant of tropical appearance. A stiff clump of sword-like leaves is surmounted by a stalk of beautiful creamy white bell-shaped flowers. Well adapted to isolated positions on the lawn or on dry banks where other plants do not thrive. 5 to 6 feet. June and July.

Phlox

As a perennial the Phlox ranks high among the most permanent and satisfactory. The foliage is good during the entire summer and the flowers range in all shades from white to deep red and purple and last from July to October. The flower is best adapted to massed planting either in beds or along the border. Set Phlox in a warm sunny place in deep rich soil. On account of the long blooming season the Phlox is a heavy feeder and should have frequent fertilization and cultivation. The following list is recommended for beauty and hardiness:

Champ Eysee—Red.

Commander—Pink.

Eclaireux—Purple.

Jean De Arc—Late tall white.

Milly Von Hoboken—Pink.

Mrs. Chas. Dorr—Light purple.

Mrs. Jenkins—White.

Mrs. Lingard—Early white.

Nemaha—Dwarf White.

Pantheon—Pink.

Pluton—Red.

Prof. Schleimann—Pink.

R. P. Struthers—Pink.

Reinlander—Pink

Richard Wallace—White, pink center.

Thor—Pink.

Van Lassburg—White.

Widar—Purple, white eye.

Yules Sandeau—Pink.



PHLOX

Peonies

There is no flower today that has so many real admirers in America as the Peony and no flower that is so universally grown. There are thousands of people who grow large blocks of peonies of many varieties purely for the pleasure and recreation they get out of it, in fact the "Peony Fan" is getting to be about as numerous as the "Sport Fan." No matter how large or small the flower garden, it seems the Peony must be there with its rugged dark green foliage and massive yet delicate blooms to complete the picture. Not only is this true but the Peony will stand more abuse and neglect than almost any other flower and yet serve well its master. Of course no one wants to abuse anything so grand and beautiful as a Peony and if you will give them the ordinary soil and care that you would any other flower you will be delighted with the results and well repaid for your efforts. Plant Peony roots in good rich, well drained soil, from two to three feet apart each way. Cover with three, or not over four inches of loose dirt and pack well. If planted too deep they are liable not to bloom and if too shallow the frost is very apt to heave the crown eyes



PEONY

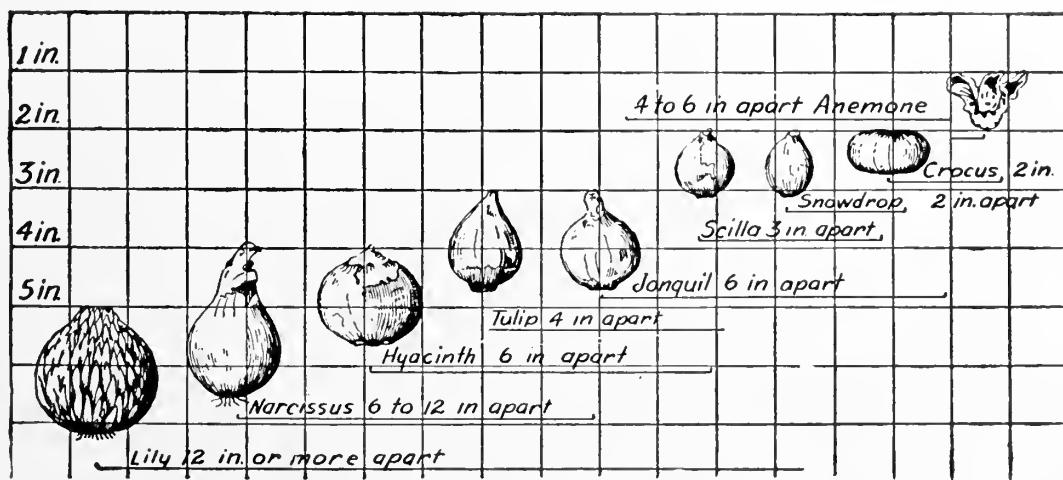
out of the ground and kill them. Give them plenty of water just before blooming time. In the fall cover the bed with about two inches of coarse manure and in the spring rake it away from the plant and work into the soil. As the plants become well filled after three or four years take up the roots early in September and divide them, leaving three or four good crown eyes to each division. These should be planted at once in a different location, or if planted in the same place it is best to dig out the old earth around the plant and fill in with new. Do not be discouraged if your blooms are not what you expected the first and second year as Peonies seldom bear true to type during the first two years. Wait until the third year and you will know exactly what you have. The following list will give you a wide range of colors from which to select.

Albero—White.
Albrecht Von Schoffelt—Rose.
Alexander Dumas—Pink and cream.
Benjamin Franklin—Crimson red.
Couronne D'Or—White and yellow.
Chas. McKillup—Crimson.
Delachei—Red, gold center.
Delicatissima—Pale pink.
Duchess De Nemours—White, lemon center.
Eugene Verdier—Pale pink and cream.
Felix Crusse—Red.
Festiva Maxima—White, red blotches.
Golden Harvest—Cream, light pink border.

Karl Rosenfield—Dark red.
Karl Verdier—Rose.
Louis Van Houtti—Red.
Madam Crousse—White.
Madam Colet—White.
Madam Smith—Pink and cream.
Mme. de Verneville—White splashed with pink.
Meissioner—Red.
Mons Jules Elie—Lilac pink.
Princes of Darkness—Dark maroon, gold center.
Richardson's Rubra Superba—Late, red.
Richard Carvel—Bright crimson.
Whitleyii—White, pink and cream center.

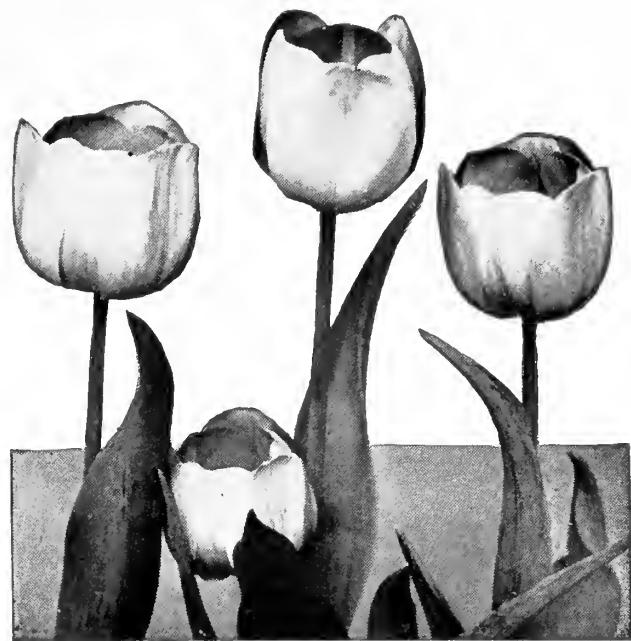
Bulbs For Fall Planting

The hardy spring blooming bulbs form one of the most valuable of the garden's assets. There are so many varieties of them and so many of them of such simple culture that the least experienced need not hesitate to undertake the growing of them. The most satisfactory soil for growing bulbs is a fibrous loam, well supplied with sharp sand and it should also possess good natural drainage. They should be planted only in the fall in order that their roots may become established for the very early bloom. After the ground is frozen mulch the bed with clean straw or litter and rake away early in the spring. Do not use fresh stable manure at any time, either in the soil or as a mulch or you will have no flowers. An ideal way is to plant in irregular patches at the edge of the shrubbery, borders or about the lawn beneath the trees. Beds may be used and definite color schemes worked out. A thin layer of sand upon which to lay the bulb will well repay for the trouble. The accompanying diagram shows the depth to plant the different bulbs.



Tulips

The tulip in spring brings a wealth of colors and shades of a wonderful richness in texture. The early tulips, both double and single, begin to flower in April. We have selected what we think to be the best varieties of the different colors.



TULIPS

Early Single—Red, pink, yellow and white.
Early Double—Red, pink, yellow and white.

BREEDER TULIPS

Cardinal Manning—Dark rosy violet, flushed rosy bronze.
Clio or Bronze Queen—Apricot colored bronze.
Yules Tavre—Bronze, inside light.
Madras—Dark bronzy yellow and old gold.
Medea—Rosy carmine, tinged with salmon.
Panorama—Deep orange red shaded with mahogany.

DARWIN TULIPS

The Darwin Tulips are beautifully outlined, cup-shaped and carried on tall, stiff stems, 18 to 24 inches in height. They bloom in May.

Bartigou—Carmine red.
Baron De La Tonnaye—Bright rose.
Clara Butt—Salmon, rose pink.
Farncombe Sanders—Fiery rose scarlet.
Pride of Haarlem—Bright rose, suffused with purple.
Rev. Ebanks—Vivid heliotrope lilac.
White Queen—Lovely soft white.
Zulu—Rich velvety purple black.
Inglecombe Yellow—Pure yellow.

Narcissus or Daffodills

The varieties in our list have been carefully chosen from the large number of varieties grown abroad and have been thoroughly tested.

Alba Pleno—Double white.
Principis—Trumpet yellow.

Hyacinth

A bed or border of Hyacinth proves attractive to every beholder. With their brilliant colors and delightful fragrance together with their long keeping qualities and decorative appearance they command a valuable place in every home and garden. Good enriched soil and extra care will be appreciated and repay many fold. We furnish them either assorted or in the following colors: Blue, red, pure white and pink.

Crocus

One of the earliest flowers to open in spring, the Crocus makes an effective show when planted in masses or where three or four rows are arranged in the border. They are perfectly hardy and can be left in the ground for several years without being disturbed. They come assorted in many varieties and shades of white, yellow, lavender and purple.

Bulbs For Spring Planting

To bring beauty during late summer and fall when most of the earlier flowers have come and gone there should be a liberal planting of Dahlias, Cannas and Gladiolus. They will help round out the season in a pleasing way. They cannot be treated as other bulbs or perennials as frost is fatal to the tubers. Dig them up in the fall before the ground freezes and after they have been thoroughly dried and cleaned store them in a cool, dry part of the cellar in shallow boxes.

Cannas—A wonderful bedding plant, very bold and striking in appearance. Does well in almost any soil but responds quickly to good care and fertilization. Plant two feet apart and three to four inches deep. We have selected the following varieties which we consider best suited for general planting.

Mrs. Alfred Conrad—Pink.

Wintzer's Colossal—Red.

King Humbert—Red.

Florence Vaughn—Bright yellow.

Tritoma, Pfitzerii—A choice border plant of free blooming qualities and a peculiar flower, rank. Scarlet to orange. Must be taken up in winter. 2 to 3 feet. August to October.

Dahlias—Very showy for late bloom, in a great variety of colors. For ordinary planting we suggest mixed varieties. If special colors are wanted, order by name. Somewhat injured by drought and should be watered during dry seasons. Plant not closer than 18 inches apart and 3 inches deep.

Darlene—Pink and white.

Frank A. Walker—Lavender and pink.

A. D. Lavoine—Shell pink.

Libelle—Deep rosy purple.

Little Jennie—Primrose yellow.

Manitou—Purple.

Marley—Yellow and white.

Maryone Casel—Pink and white.

Mrs. Bowentuft—Rose purple.

Storm King—White.

Souvenir De Gustav Duazon—Orange red.

Yellow Duke—Yellow Primrose.

Gladioli—It is certain that no flower can give so great beauty for so little expense and labor as a good collection of Gladioli. They are easily grown and the bulbs can be used for years if they are carefully stored as explained above. They make beautiful cut flowers for the house during the late summer and fall. Bulbs should be planted four inches deep in good mellow soil. Order either assorted or special named varieties.

America—Pale pink.

Assorted—All colors.

Black Hawk—Cardinal red, black blotch.

Chris—Dark maroon.

Empress of India—Purple.

Fairfax—Purple.

Halley—Salmon pink.

Heley Franklin—White, violet markings.

Hohenstouffen—White center.

Jesse—Rich velvety red.

Maiden Blush—Pale cream.

Marshall Foch—Rose pink.

Mrs. W. E. Fryer—Blood red.

Mrs. Frances King—Red.

Mrs. Whitney—Yellow, light.

Peace—White.

Pendleton—Pink, blotched with red.

President Taft—Pink.

Primanulis—Yellow.

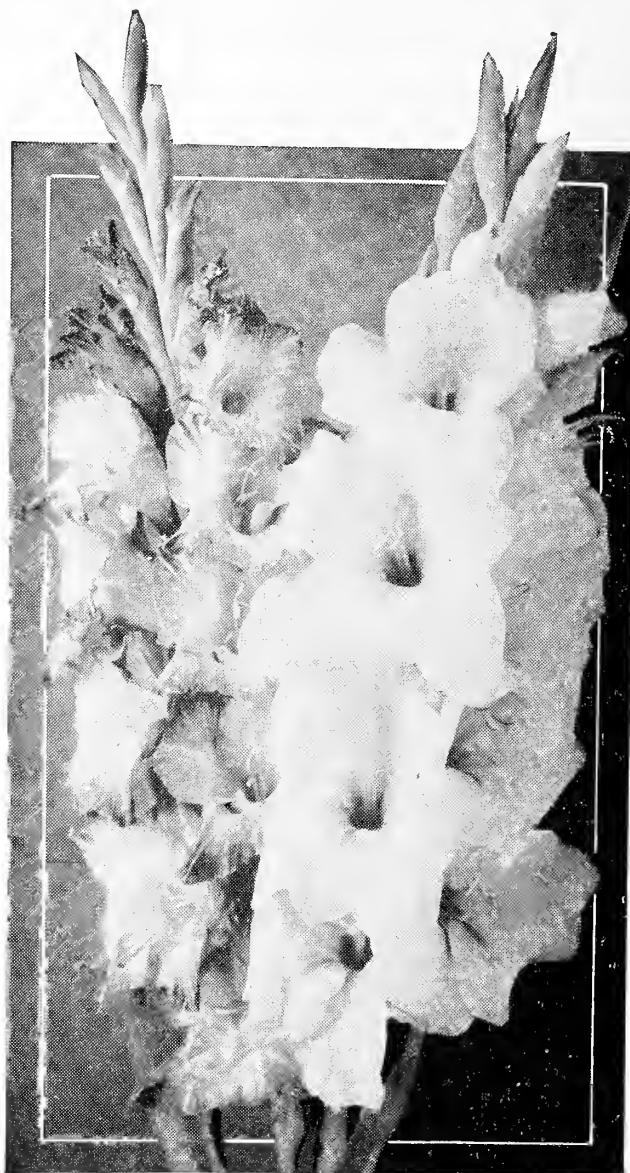
Schwaben—Yellow.

War—Dark red.

White Giant—White.

Wilbrink—Light pink.

Willie Wigman—White.



GLADIOLI

The Iris

German Iris—Can be grown in any kind of soil successfully but it loves a moist situation best. They are in bloom usually before Memorial Day and the flowers cover the most exquisite tints and colorings. We believe we have one of the finest assortments of this popular plant to be found anywhere.

Desk Clark—White and violet.

John De Witte—Light purple.

Flavescent—Cream and white.

Lord Grey—Light cherry.

Flava White—White.

Madam Chereau—Violet.

Gertrude—Violet.

Magnifica—Reddish violet.

Her Majesty—Pink.

Rhein Nixe—White and purple.

Honorabilis—Yellow and brown.

Velveteen—Cream and cherry.

Ignita—Light violet.

Japanese Iris—This should not be confused with the German Iris, as they are an entirely different strain. It blooms a month later, has a much larger flower, but is not so free a bloomer. It makes up in size and intensity of coloring what it lacks in abundance of bloom.

Snow Queen—White.

Fairy—Purple.

Blue King—Purple.

Japanese—Sky blue.

Superba—Dark purple.

Siberian Iris—These are a Siberian variety of extreme hardiness. They are the latest to bloom of all the Iris family.

Gravet—Violet and light blue.

Alba—White.

Proper care of flowers will pay big dividends

Lilies



TIGER LILY

Although the lily is one of the most stately and attractive of all the blooming garden plants they seem

to be also the least understood and appreciated. The ornamental value of the lily lies almost entirely in the flowers as they are of scant foliage and of a character altogether foreign to the usual blending of parts. Most lilies are heavy bloomers and are very striking in color and should be grouped against a strong green background for the best effect. They love warm sun but their bulbs will not stand hot baked soil. The soil most desirable is a loose sandy loam which will be enriched by a top dressing of manure and should be well drained. They should be sheltered from the wind and if possible be shaded at noon. Keep bulbs from undue exposure to air and plant in the spring about six inches deep. Winter mulch always pays. Never allow manure to come in direct contact with the root bulbs. They may be left in the ground from year to year. The following list gives a wide range of color from which to select and are perfectly hardy.

- Auratum**—White, dotted with chocolate red.
- Coerulea**—Light purple.
- Day Lily**—Orange.
- Flava**—Yellow.
- Lancolata**—Light purple.
- Hemerocallis Thunbergi**—Orange.
- Lilium Candidum**—Pure white.
- Lilium Elegans**—Red.
- Magnificum**—White flecked with dark red.
- Regale**—Ivory white, splashed with yellow, pink stripes.
- Rubrum**—White, spotted with rose red.
- Tigrinum**—Orange, dotted with crimson.
- Umbellatum**—Red.
- Variegata Funkia**—Purple, variegated leaf.

Roses



The rose has truly been christened the "Queen of Flowers." There is no flower so beautiful, so fragrant and so universally loved and appreciated as the rose. Originally the rose was considered more of a tropical or hot house plant, but with the introduction of the many varieties of Hybrid Perpetual Roses, horticultural science has made it possible for the Northwest gardener to enjoy as wide a variety and as beautiful rose beds as our Southern neighbors. These Hybrid Roses, crossed between the June and Monthly roses, retain not only the hardiness of one parent but also the perpetual blooming habits of the other. As all hybrid roses bloom on new wood only they should be cut off to about eight or ten inches above the ground each spring and they will send up good strong shoots that will produce much larger blooms than will the weak slow growth from the old wood if left untrimmed. Clipping of the seed pods is also an aid in the blooming. When setting out new plants, make the ground rich with well rotted manure well worked in and dig the holes large enough so that the roots will not be crowded. Cut new plants down to about six inches from the ground and water liberally when planting. They should be kept well cultivated until about July 1st and then well mulched with straw or lawn cuttings. Spray with lime-sulphur for fungus and with arsenate of lead for slugs and caterpillars. All hybrid perpetual roses need winter protection. This can be easily done by throwing up a mound of earth around the plants about twelve inches high before the ground freezes and after the ground is frozen cover the bed with branches or coarse corn stalks to hold the winter snows. After the frost is gone in the spring remove the litter and earth and cut back at

once. The following lists are grouped as to color to make easy selection and are recommended for hardiness.

HYBRID RUGOSA ROSES

These new hybrid rosa Rugosas can be grown anywhere in Minnesota or the Dakotas without winter protection. They are a wonderful addition to the rose family being exceptionally free from worms and disease. They grow to four or five feet high, start blooming early and continue through summer to late fall, furnishing an abundance of cut flowers the entire season. They make the most beautiful flowering hedge known.

- Blanche de Courte**—Double white.
- Belle Poitevine**—Double deep pink.
- Conrad F. Meyer**—Double pink.
- Grootendorst**—Double bright crimson.
- Hansa**—Double red.
- Sir Thos. Lipton**—Double white.
- New Century**—Double rose pink.

HYBRID PERPETUAL ROSES

- | | |
|---------------------------------|---------------------------|
| RED | WHITE |
| American Beauty. | Frau Karl Druschi. |
| General Washington. | Mable Morrison. |
| General Jack. | Margaret Dickson. |
| Gruss en Teplitz. | Madam Plantier. |
| Louis Van Houttii. | |
| Marshall P. Wilder. | |
| Prince Camille de Rohan. | |
| Ullrich Brunner. | |
| Amelia Grovonaux. | |
| Captain Hayward. | |
| J. B. Clark. | |

- | | |
|--------------------------|--------------------------|
| PINK | PINK |
| Anne de Diesbach. | Anne de Diesbach. |
| His Majesty. | His Majesty. |
| John Hopper. | John Hopper. |
| LaFrance. | LaFrance. |
| Mrs. John Laing. | Mrs. John Laing. |
| Magna Charta. | Magna Charta. |
| Persian Yellow. | Paul Neyron. |

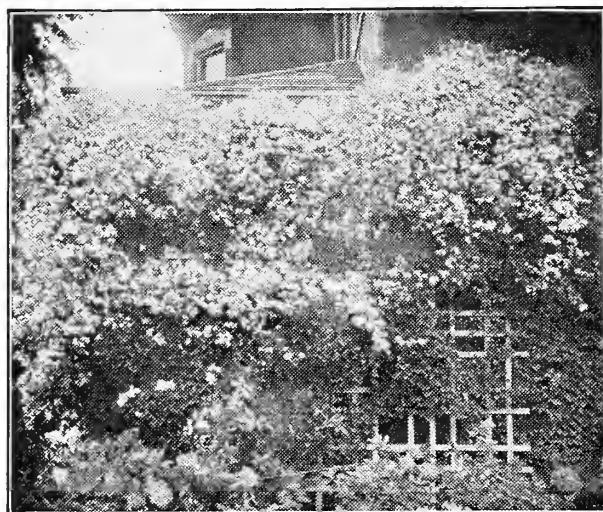
CLIMBING ROSES

Climbing roses should be trimmed back sparingly after the first year and taken down and covered during the winter. Spray same as hybrid perpetuums.

- | | |
|---------------------------|-----------------------------|
| WHITE | RED |
| Dorothy Perkins. | Baby Rambler. |
| Baltimore Belle. | Crimson Rambler. |
| Baby Rambler. | Climbing American |
| White Rambler. | Beauty. |
| | Excelsa. |
| Pink Baby Rambler. | Flower of Fairfield. |
| Dorothy Perkins. | Tausendschoen. |
| Pink Rambler. | Single Red Climber. |
| Prairie Queen. | |

Climbing Vines

Climbing vines play a very important part in all landscape planting. With them many a stone wall or unsightly back yard fence can be transformed into a pleasing background for inside planting. Brick, stone



CLEMATIS PANICULATA

or stucco walls of the home which look bare and brazen may be softened and beautified with climbers. The flowering sorts should be well cared for the first year and the earth thrown up in a mound at the trunk to prevent water standing around them. Cut worms sometimes work havoc with the young tender sorts but this can easily be prevented by removing both ends of a good sized tin can and pressing it down over the plant; wood ashes are also very effective.

Ampelopsis, Englemanii—Short jointed with fine foliage. Clings to brick or stone. A good grower and very hardy. The best for the north and northwest. Foliage beautiful red in fall.

Ampelopsis, Quinquefolia—The old original Virginia Creeper, sometimes called Woodbine. It is an extremely rapid grower. Leaves are deeply cut and turn to a beautiful shade of red in the fall.

Bittersweet—A native climbing or twining plant with fine, large leaves. Yellow flowers and clusters of orange, capsule fruit. It grows ten to twelve feet in a season.

Clematis, Henryi—New and one of the best perpetual hybrids, of robust habit. The flowers are white, large and very showy.

Clematis, Jackmanii—Flowers from four to six inches in diameter, intense violet-purple with a velvety appearance, very hardy. A free grower and often blooms from midsummer until frost. Fine for porch or trellis.

Clematis, Madam Ed Andre—Flowers large and of a

beautiful wine color. Free flowering and continuous bloomer.

Clematis, Paniculata—A great novelty from Japan. It has proved to be one of the most desirable, useful and beautiful of all hardy vines. A luxuriant grower and profuse bloomer. Small, white fragrant flowers in September. Useful for covering verandas, pillars or fences where a trellis or support can be provided. Makes a growth of twenty to thirty feet in a single season and should be cut back to the ground each season.

Dutchman's Pipe—A vigorous and rapid growing climber, with yellow-brownish flowers resembling a pipe in shape. Fine foliage of light green leaves of large size which retain this color from spring to fall.

Hall's Japanese Honeysuckle—A strong, vigorous, almost evergreen sort, with pure white flowers changing to yellow. Very fragrant and covered with flowers from July to November. Holds its leaves until January.

Honeysuckle, Climbing Scarlet Trumpet—Semi-evergreen, scarlet flowers followed by berries of the same hue. A special favorite with all lovers of old fashioned flowers.

Matrimony Vine—Produces a large number of purple flowers which are succeeded by bright scarlet berries almost an inch long. It blooms throughout the summer and the fruit remains on the vine until late in winter.



WISTERIA

Wisteria—One of the most rapid growers of all the climbing plants. Grows fifteen to twenty feet in a season. Has long pendulous clusters of pale blue flowers in May and June and sometimes in autumn.

Flowering Shrubs

There is nothing that can add more to the beauty of the home than to have the sides and background well filled with nicely arranged groups of shrubbery. By a judicious selection of varieties a succession of bloom may be had from early spring until late fall. The flowers may be had in many forms and in going over the following list it will pay to make some attempt at following out a blooming scheme. Shrubs, for best results, should not be scattered about the lawn, but massed in irregular groups against the buildings, in the corners and at the back and sides of the lawn. This is done to leave broad areas of light and shade which is essential. All following shrubs with the exception of a few in this list marked (*) should be cut back severely at planting time leaving not more than six to ten inches above the ground. This will not only aid the roots in establishing themselves, but will cause the plant to form a more compact and shapely head. Those marked (*) should be trimmed very sparingly if at all. Shrubs should be trimmed each year after established and it is better to cut out the older canes than to make a general top trimming unless a heavier growth at the bottom is desired. Flowering shrubs should not be trimmed until after they are through

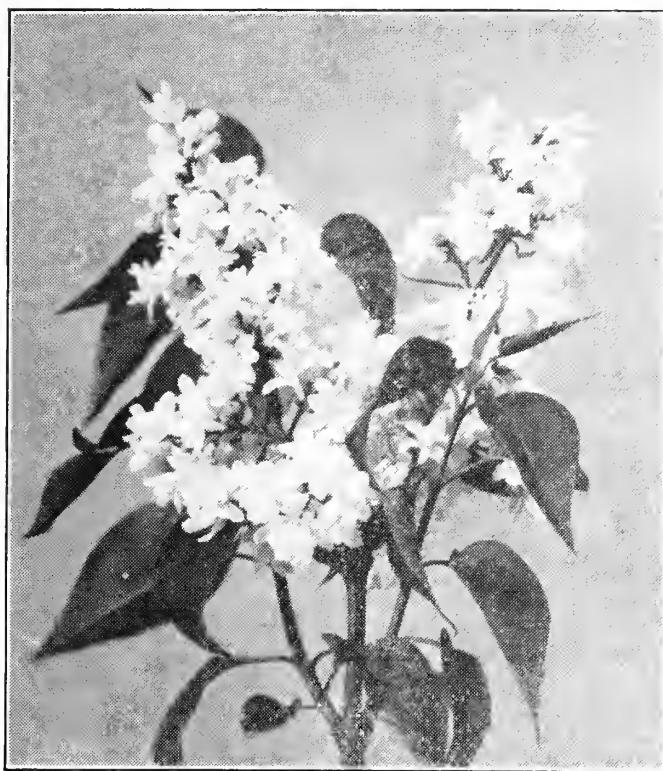
blooming as they will not bloom if trimmed in the early spring. Mulching and spraying always pays.

Aralia Spinosa (Hercules Club)—A singular looking, small sized tree with very prickly stems. Pinnate leaves and bearing immense panicles of white flowers in midsummer. Very useful to give a tropical effect to gardens and for odd looking clumps for background.

Artemisia—Deep green, cleft foliage and compact bush shape. The creamy white flowers, which resemble Herbaceous Spireas, are sweetly scented, and borne in large terminal panicles on erect stems. 3 to 4 feet. August and September.

Red Leaved Japanese Barberry—The foliage of this new variety is of a rich, lustrous, bronzy red. Becomes more brilliant and gorgeous throughout the summer and in the fall color changes to a vivid orange. All that is required to develop its brilliant colorings, at all seasons, is that it be planted in full exposure to the sun.

Cotoneaster—An attractive, beautifully formed shrub with thick, glossy leaves, turning to red in the fall. Small white flowers in early summer followed by large



PERSIAN WHITE LILAC

black berries which remain on the bush nearly all winter. Perfectly hardy. 8 to 10 feet.

Cranberry, High Bush—Handsome native shrub. Flowers white in flat clusters, followed by bright scarlet berries which hang to the bush through the winter. 8 to 12 feet. May and June.

Currant, Alpine—Dense and upright. Yellow bloom. Excellent for dry sterile soils and under planting. Foliage beautiful. 3 to 5 feet. May.

Currant, Yellow Flowering—Very hardy and has a profusion of yellow fragrant flowers followed by brownish fruit. Does well in shady locations. 5 to 6 feet. May.

***Crab, Double Flowering**—Tree of medium size covered with double fragrant flowers of delicate pink to white. Hardy and blooms when quite young. 15 feet. May.

Dogwood, Siberica—Blood red branches. Grows in great tangled masses when mature. Flowers yellowish white, fruit pearly white. 5 to 8 feet. May and June.

Dogwood, Variegated—Fine variegated leaved shrub, of rapid growth and valuable to plant singly or in groups. Leaves are distinctly variegated, white and green. 4 to 6 feet. May and June.

Dogwood, Stolonifera—A hardy shrub with bright red bark in winter. White flowers in flat clusters. White berries. 6 to 10 feet. June.

Double Flowering Almond—A low shrub, upright in growth and one of the most spectacular in early spring. Blooms early and profusely. We have them in red, pink and white. 3 to 5 feet. May.

Elder, Common—A large rapid growing shrub with immense flat clusters of white blossoms in early summer followed by black berries which are often used for pies, etc. 8 to 12 feet. June and July.

Elder, Cut Leaved—A strong grower with elegantly divided foliage. Does well in shaded locations. 8 to 10 feet.

Elder, Golden—A beautiful rapid growing shrub, with bright golden foliage, the metallic luster of which is relieved in season by masses of white bloom. 6 to 8 feet. June and July.

Elder, Red Berried—Blossoms white, produced in great profusion followed by bunches of red berries. Bush vigorous and hardy. 8 to 12 feet. April and May.

Forsythia, Fortuna—An upright spreading bush with handsome pendulous trumpet shaped, bright yellow blossoms.

Foliage deep shining green. Not exceedingly hardy. 6 to 8 feet. April and May.

Forsythia, Suspensa—Slender arching branches lapping over on the ground. Flowers striped with yellow. Useful for banks and walls. Needs winter protection. 6 to 8 feet. April and May.

Honeysuckle, Tartarian—One of the most popular ornamental shrubs. Very hardy, large growing, easily transplanted and does well in any soil. Abundant foliage and delicate flowers, followed by red or yellow berries. We grow the red, pink and white; state color wanted. Does not need much pruning. 8 to 15 feet. May and June.

Honeysuckle, Morrowi—A Japanese variety. Remarkably fine plant with wide spreading branches. Yellow flowers, followed by red berries during the latter part of the summer. Leaves remain late in fall. 4 to 6 feet. May and June.

Hydrangea, Paniculata Grandiflora—A most valuable shrub. Medium size with fine large foliage and immense trusses of white flowers, changing to pink and finally reddish brown. Bushes transplant very easily and usually bloom the first year set out. Plant singly or in groups. Bushes should be trimmed back severely each spring to get nice large flowers. 3 to 6 feet. August to September.

Hydrangea, Arborescens—A vigorous upright shrub with creamy white flowers in flattish clusters. Foliage finely finished. Excellent for grouping with other shrubs as it blooms after most of the others are through. 4 to 6 feet. June to August.

Butterfly Bush—Sometimes called the summer lilac. The violet colored blossoms are borne in terminal panicles and one bush will often attract hundreds of butterflies. Fragrant and showy. 3 to 6 feet. Late summer.

Juneberry—A high growing treeforming shrub with drooping racemes of feathery, pure white flowers. Berries resemble blueberries in both appearance and taste. 10 to 20 feet. May.

Lilac, Chas. X—Very hardy. This variety is a grand improvement over the common purple. Flowers reddish purple, one-half larger and more abundant. 8 to 10 feet. May and June.

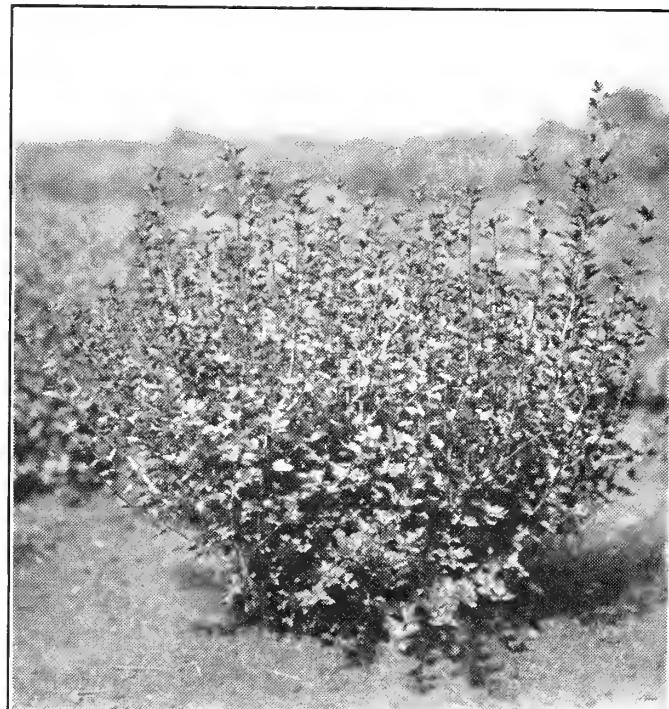
Lilac, Common Purple—A very hardy, large growing shrub, with purple flowers. Much used in hedges and individual planting. 8 to 12 feet. May.

Lilac, Common White—Of rapid growth, with large shining foliage. Produces large clusters of fragrant white flowers. 8 to 10 feet. May.

Lilac, Josica—A distinct sort of tree-like habit, producing purple flowers when most others have ceased to bloom. 6 to 10 feet. June.



SYRINGA OR MOCK ORANGE



ALPINE CURRANT



TARTARIAN HONEYSUCKLE

Lilac, Ludvig Spaeth—Panicles long, individual flowers large, dark purplish, red, distinct. The finest of its color. 6 to 8 feet. May and June.

Lilac, Madame Lemoine—Undoubtedly one of the best profuse blooming double white lilacs. Always satisfactory. 6 to 8 feet. May and June.

Lilac, Marie LeGrey—Large panicles of single white flowers. One of the finest and best blooming sorts. Very fragrant. 6 to 10 feet. May.

Lilac, Persian Purple—A more graceful form than some varieties of lilac. The branches are slender, leaves finer and more pointed. Flowers are purple, very fragrant and borne in large panicles. 6 to 8 feet. May and June.

Lilac, Persian White—Similar to the Persian Purple except that the flowers are white. Very good variety. 6 to 8 feet. May and June.

Lilac, Pres. Grevy—Individual flowers of the largest size, very double, trusses large. One of the best blue sorts. 5 to 8 feet. May.

Lilac, Villosa—A Japanese variety. Flowers are silvery rose and produced in great profusion. A grand distinct type and very satisfactory. 6 to 8 feet. May and June.

Maple, Tartarian—A dwarf shrubby tree with handsome, finely cut leaves. Good for grouping or planting singly in corners. Attractive clusters of winged seed pods. 15 feet.

Prunus, Pissardi—Large shrub or small tree used to color up shrubbery plantings. Its shining purple leaves hold their color well during the summer. 5 to 10 feet.

***Prunus, Triloba**—A beautiful shrub of medium height, blooming with a great profusion of delicate, pink, rose-like blossoms. Resembles the Flowering Almond but the bush is hardier and larger. Without doubt one of the prettiest shrubs we have. Fine foliage. 6 to 8 feet. May.

Prunus, Tomentosa—A white flowering plum. Valuable for its ornamental fruit and foliage. 8 to 10 feet. May.

Wayfaring Tree, Viburnum Lantana—Exceedingly interesting with large showy leaves and broad flat flower clusters in white. Can stand full sun. 10 to 15 feet. May and June.

Snowball, Viburnum Lentago—Large clusters of cream flowers followed by bluish black fruits. Leaves bronze in spring, orange and scarlet in fall. 15 to 20 feet. May and June.

Snowball, Viburnum Dentatum—Upright and bushy with an excellent green foliage. Flowers pure white, scarlet berries. 8 to 10 feet. May and June.

Snowball, Viburnum Opulus, Sterilis—A splendid ornamental with large, globe-like balls of white flowers. No fruit. Extremely hardy. 6 to 8 feet. May and June.

Snowberry, White—A rather low growing shrub with small pink flowers, followed by white berries, which hang on until winter. Exceptionally fine foliage. 2 to 4 feet. July and August.

Snowberry, Red—Commonly called Indian currant. Similar to the white except that the fruit hangs in large clusters of bright coral red. 2 to 4 feet. July.

Spirea, Anthony Waterer—An improved variety of this type, upright grower, large heads of dark crimson flowers. Not hardy in Northern climates. Fine for inside planting. 2 feet. July to October.

Spirea, Arguta—A Japanese variety of stiff irregular growth and white flowers which appear before the leaves. Foundation or border planting. 4 to 6 feet. April and May.

Spirea, Billardii—A fine spirea with panicles of bright pink flowers. Medium size, upright grower. Much used in shrub borders. 4 to 5 feet. July and August.

Spirea, Bumalda—Stiff and upright with new growth tinged with purple. Flowers rosy pink in flattish heads. 2 feet. July to September.

Spirea, Collosa Alba—Similar in growth and habit to the Anthony Waterer. The blossoms however are pure white. A free and continuous bloomer. 2 feet. June to August.

Spirea, Collosa Rosea—Flowers pale to deep pink. Unfolding leaves give a rich purplish cast to the whole plant. 3 to 4 feet. June and July.

Spirea, Douglasi—Deep rose plumes, used in border or behind lower shrubs about the house foundation. 5 to 7 feet. July and August.

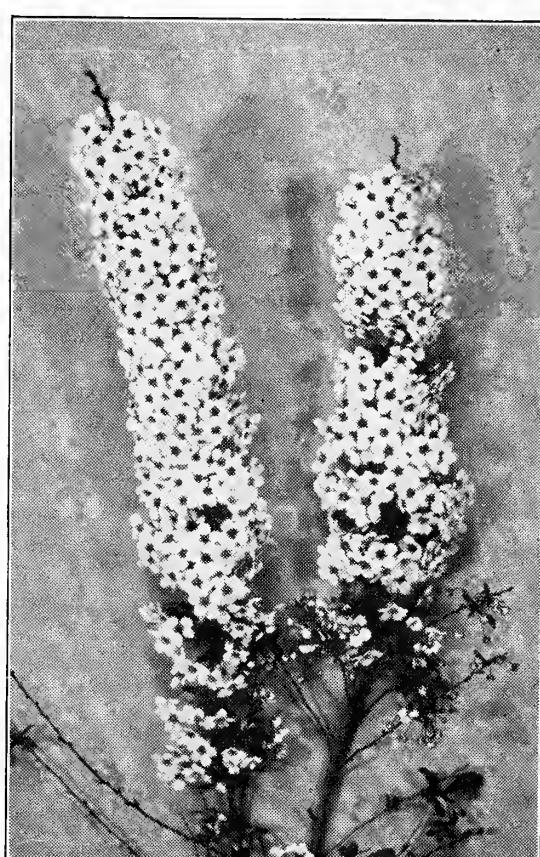
Spirea, Froebelli—Flowers bright rosy red in flat clusters. Excellent as a border shrub. Foliage turns purple in the fall. 2 to 3 feet. July and August.

Spirea, Opulifolia—The largest growing species of this group. Valuable for massing and also for background for other shrubs. White flowers. 6 to 8 feet. June.

Spirea, Prunifolia—A fine variety with plume-like leaves. Tiny rose-like bloom. Not very hardy and should have winter protection. 4 to 5 feet. April and May.

Spirea, Sorbifolia—Of a vigorous species with leaves like the Mountain Ash and long elegant spikes of white flowers. 5 to 6 feet. June.

Spirea, Salicifolia—Long, narrow willow-like leaves. Flowers rose colored. A distinct and very desirable variety. 4 feet. July and August.



SPIREA ARGUTA

Spirea, Thunbergii—One of the finest spring blooming small shrubs. The flowers are pure white and are borne along the entire length of the branches. 3 to 5 feet. April and May.

Spirea, Van Houtti—The grandest and most popular of all the Spireas, and as desirable as any shrub in cultivation. White flowers in clusters about an inch in diameter produced freely, almost covering the foliage. Hardy anywhere. Can be used in borders, about the foundation or as a hedge with good effect. 4 to 6 feet. May.



HYDRANGEA PANICULATA GRANDIFLORA

***Sumach, Cut Leaf Staghorn**—This shrub is becoming very popular for landscape plantings. It is of spreading habit with large, long, fine cut, lace-like leaves which turn to a beautiful color of gold in fall. 10 to 20 feet. June and July.

***Sumach, Dwarf Cut Leaf**—Deeply cut leaves, giving the whole shrub a fern-like appearance. Leaves turn bright red in autumn. 3 to 5 feet. July.

***Sumach, Rhus Glabra**—A native large growing shrub well adapted for covering barren hills. Very effective for coloring in landscape work, the leaves turning golden hued late in the summer. 8 to 12 feet. July.

Syringa, Golden—A compact shrub with bright yellow foliage, very effective as a foliage plant. 4 feet. May and June.

Syringa, Grandiflora—A large and vigorous growing shrub producing an abundance of creamy white flowers of unusual size and fragrance. 6 to 10 feet. June and July.

Syringa, Lemoine—A showy and free flowing variety with slender arching branches. Flowers creamy white and very fragrant. 5 to 7 feet. May and June.

Syringa, Mock Orange—A vigorous growing shrub with sweet scented white flowers in the greatest profusion. Foliage bright and handsome. 8 to 10 feet. May and June.

Syringa, Virginalis—A magnificent new Mock Orange growing 6 to 8 feet and vigorous. It has large petals, double crested white flowers, five to seven in a cluster, sweet scented and very fine. Long blossom season.

Syringa, Mount Blane—One of the very best of the Syringa family. Produces a mass of sweet scented white flowers covering the entire plant for a long time. Perfectly hardy and not subject to disease. 5 to 6 feet. May and June.

Tamarix—A distinct type of shrub, having leaves somewhat like the Juniper, crowned with delicate pink flowers. Valuable for grouping. 6 to 10 feet. July to September.

Weigelia, Rosea—Large trumpet shaped, rose colored flowers, are produced so freely that they nearly hide the leaves. Needs winter protection. 4 to 6 feet. May and June.

Weigelia, Eva Radke—A remarkably free bloomer. Flowers deep carmine crimson with yellow stamens, quite different from other varieties. Needs winter protection. 4 to 6 feet. All summer.

Weigelia, Variegated—A distinct variety having variegated leaves and an abundance of white flowers. 4 to 6 feet. May and June.

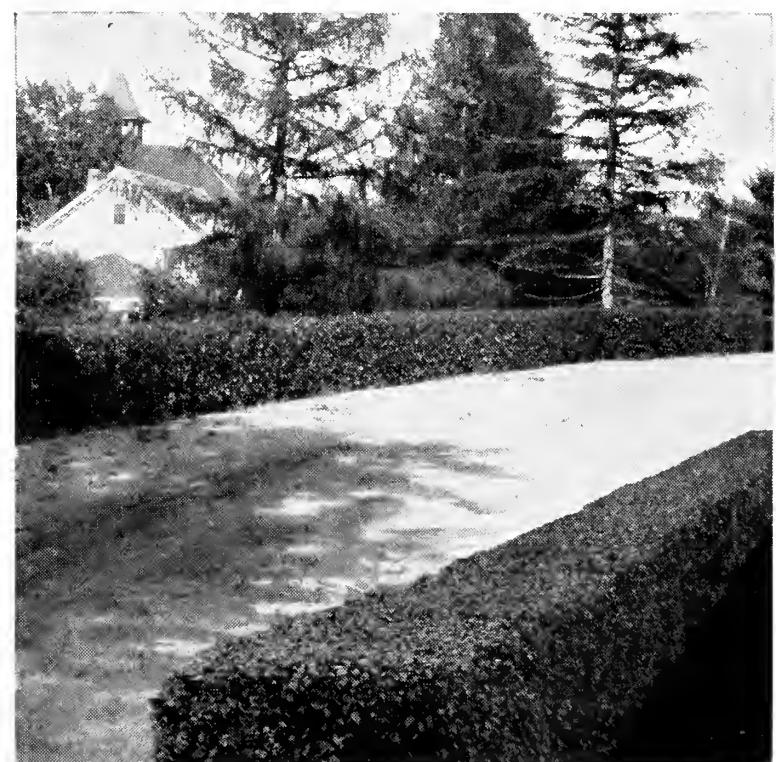
Ornamental Hedges

On small grounds the low growing hedges are the most used, while for larger grounds and for screening the higher and more spreading sorts are more adaptable. For hedge purposes the plants should be set one foot apart and pruned severely at planting time. Have the ground fairly rich and stirred to a depth of at least a foot to give the young roots a better chance to start. Keep your hedge free from weeds and grass by cultivating at least a foot on each side. Hedges



BARBERRY THUNBERGI HEDGE

An ornamental hedge is almost an indispensable factor in building a landscape. It frames the lawn and makes a natural background for all inside planting.



BUCKTHORN HEDGE

can be kept at any desired height by trimming, which should be done regularly and at close intervals to induce a heavier growth of foliage near the ground. Hedges where used in place of a fence, unless they are of the flowering type, should be trimmed to maintain a formal appearance. Those listed below are not classed as flowering hedges, but if grown in tree form, are more or less flowering.

Amoor River Privet—The only one of the Privet family that is hardy in the Northwest. Upright in growth, very drought resistant and can be grown in shade. Stands any amount of trimming. When not kept cut bears white flowers followed by bluish-black seeds.

Buffalo Berry—A large growing shrub which makes a fine hedge, the effect of the light grey foliage being very striking. Very resistant to drought and winter killing. Has yellow flowers in June, followed by red berries which are edible.

Barberry, Thunbergii—This pretty dwarf shrub is used more than any other for ornamental and hedge planting. It is remarkable for its dense spreading growth and attractive appearance. Starts early in the spring and is covered densely with small dainty leaves which color to a brilliant hue in the fall. Large quantities of red berries are produced which hang on throughout the winter, giving a very striking appearance. This variety does not harbor wheat rust and should not be confused with the Purple Leaf Barberry, which is under government quarantine.

Buckthorn—Without doubt the most universally known hedge plant grown. Extremely rugged and hardy and stands any amount of pruning. Foliage dense and dark green. Very light bloomer.

Caragana, Arborescens—Thrives in any well drained soil. Very compact in its growth and desirable for a medium or tall growing hedge. Hardy in the most exposed locations.

Hedgewood—This is something new in hedges and seems to be gaining in favor rapidly. Has olive-green foliage and reddish-brown twigs. Will stand frequent trimming and also makes a beautiful high hedge when left growing.

Russian Olive—A very large growing shrub. The leaves are narrow and silvery white in color. Stands trimming well, perfectly hardy and easy to grow.

Spiraea, Van Houtii—Although one of the most popular of the flowering shrubs, it makes a beautiful trimmed hedge and can be trimmed to almost any desired shape. When used in trimmed form, foliage forms a very dense mass of green throughout the summer. As a flowering hedge, when left untrimmed it has no equal, producing a mass of beautiful white flowers in May and June.

Lilae, Persian Purple—This rugged shrub when trimmed in hedge form presents a most pleasant appearance. The leaves are quite large and grow very prolifically when kept trimmed. It is very hardy and dense in growth, and can be trimmed to any form.

Shade and Ornamental Trees



AMERICAN ELM FOR STREET PLANTING

Ash, American, White or Green—A native of fine symmetrical outline; valuable for street and park purposes. Thrives best in North and South Dakota.

Birch, Paper or Canoe—One of the handsomest trees in cultivation and a vigorous grower. When young the bark is dull brown, but changes as the tree grows older to a shiny, silky white, rendering it very attractive.

Birch, European, White—A distinct, native species of vigorous, rapid growth. Bark white, leaves triangular, tapering and pointed. It is very hardy and will grow in sandy or rocky soil and in any climate.

Box Elder, Ash-Leaved Maple—This species is easily distinguished by the pinnate leaves and greenish-yellow bark. It grows rapidly into a large, spreading tree; found valuable for planting timber claims, shelter belts, etc., in the west where it endures both drought and cold.

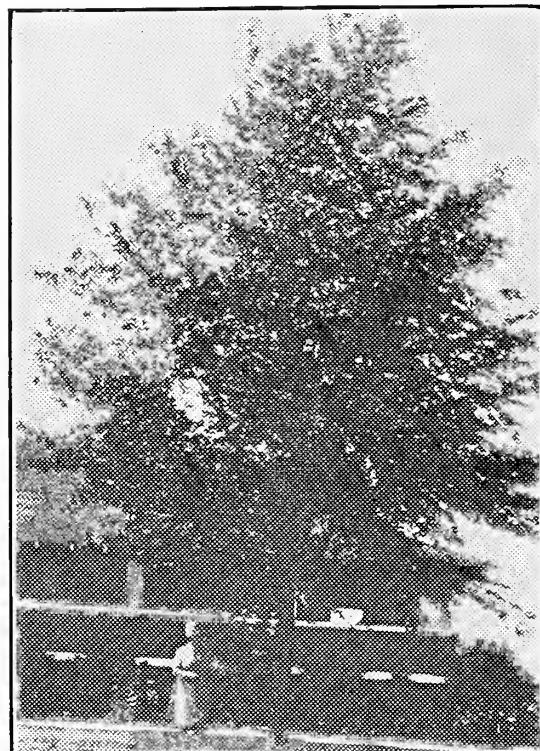
Catalpa, Speciosa—Very fine for shade and ornamental purposes; never subject to the attack of insects. Hardy in Southern Minnesota and the South.

Chinese Elm, (Ulmus Pumila)—A very hardy species extensively grown in Siberia and Northern China. The tree is not as large as our American Elm, but is very graceful and shapely. It has become very popular in some localities on account of its ability to thrive on very dry soil and in extreme climates. It is a fast

grower, making a medium sized tree much sooner than the average shade tree. It is a wonderful tree for street planting as it reaches maturity earlier and does not become overgrown.

Elm, American, White—This is the noble spreading and drooping tree of our own forests. A fast grower, extremely hardy and in every way desirable for street and park planting. The American Elm is the first choice of the experienced landscape designer.

Hackberry—A very handsome native tree of rapid growth and great vigor. Bears transplanting well. The character of its growth is similar to the Elm, though the top is not quite so spreading as that variety.



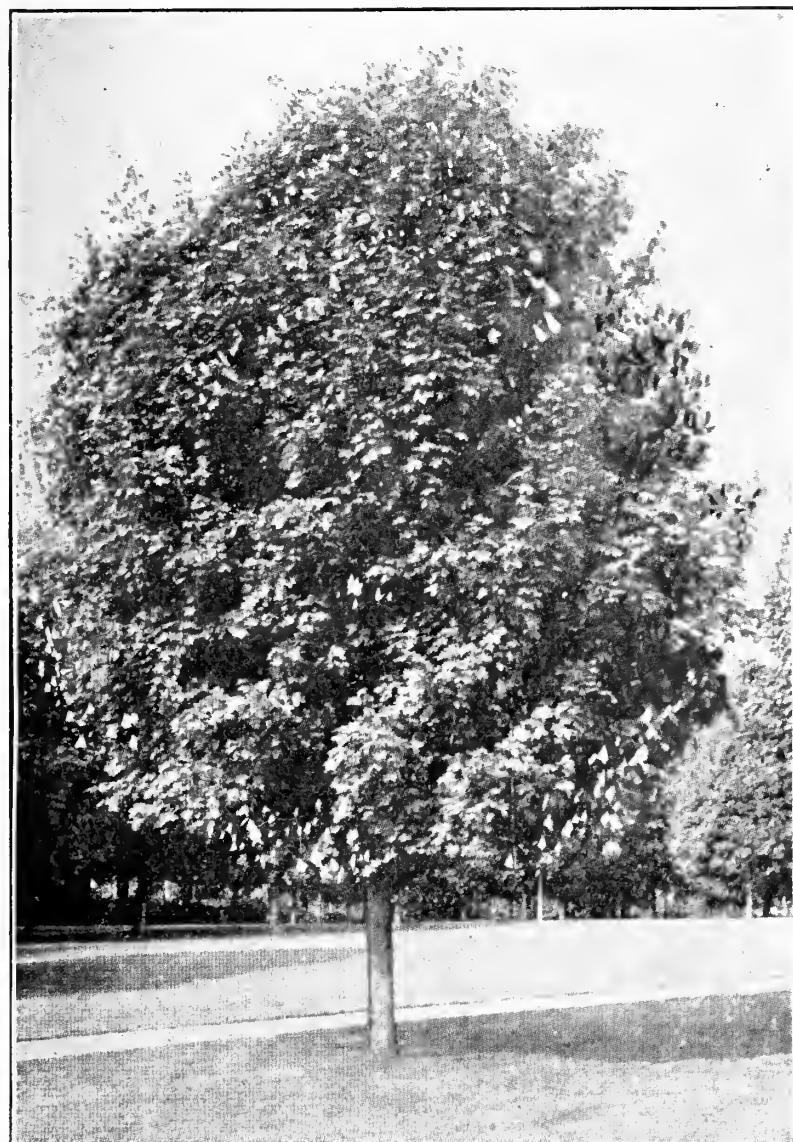
CHINESE ELM SEVEN YEARS OLD

Horse Chestnut or Buckeye—This tree has an elegant pyramidal form with large, lobed leaves and showy upright panicles of white flowers. Tree hardy, vigorous and free from insect pests and is among the first trees to unfold its leaves in the spring.

Linden, American or Basswood—Rapid growing large sized tree with remarkable straight trunk; deep green, heart-shaped leaves and clusters of fragrant yellow flowers.

Locus, Black—Very pretty shade or ornamental tree, with sweet scented flowers in spring. Not overly hardy.

Locus, Honey—Tree of very open handsome habit and finely divided foliage. Winter bark brown and olive, while twigs shine as if polished. Hardy.



NORWAY MAPLE

Maple, Norway—A tree of foreign origin; a sturdy and symmetrical grower, forming a broad, spreading rounded head. The leaves are deep green, large and broad, and cling to the branches longer than other sorts.

Maple, Sugar or Rock—A valuable native tree for lumber as well as shade and ornamental purposes. It is adaptable to all locations. Roots deeply and grows symmetrically into a tree of large proportions.

Maple, Weir's Cut Leaf—A very beautiful silver leaf sort with delicately cut leaves and distinct half-drooping habits. It grows rapidly, forming a straight, upright trunk with slender branches that curve gracefully downward. Very hardy.

Maple, Silver or Soft—A magnificent shade and ornamental tree of rapid growth. It is perfectly hardy and will thrive in any soil and in any locality. The leaves are beautifully shaped and have a silvery gleam. The hardiness and ease of culture of this tree makes it one of the most desirable for street and park planting.

Maple, Schwedleri (Red Leaved)—Much like its parent, the Norway Maple, except that all new leaves are a bright purplish red, changing later to dull green. Makes fine color contrast where planted with other green-leaved trees or shrubs.

Mountain Ash, European—A fine, hardy tree; head dense and regular, covered from July to winter with large clusters of bright scarlet berries. Very popular for lawn planting. Hardy in all sections.

Mulberry, Russian—It is largely planted for screens and windbreaks, also for shade trees. The fruit, which is rather small, is appreciated by birds and fowls.

Newport Plum—A plum tree of striking appearance; moderately vigorous, upright growing, hardy, foliage of a deep reddish-purple color, retaining its color throughout the season; fruit is small to medium.

Oak, Scarlet—One of the best of the oak family. It forms a fine large tree of vast proportions, the large leathery leaves turning to a fiery scarlet in autumn.

Poplar, Bolleana—Much like the Lombardy in narrow upright growth. Leaves gracefully cut, light green above and clear white beneath. Very attractive olive-green bark. Very hardy.

Poplar, Balm of Gilead—A handsome native with thick, dark ovate leaves, silvery beneath. The spicy gum of the buds is used medicinally.

Poplar, Canadian—A variety of the Russian Poplar which has proven extremely popular on the western prairies. This tree is especially distinguished from the Carolina type by its light green bark and slightly oblong lobed leaves. The best poplar for windbreak purposes.

Poplar, Cottonwood—A tall native tree with shiny leaves, attaining a height of 80 to 100 feet. Grows rapidly and is very hardy, thriving under most adverse conditions.

Poplar, Lombardy—Of obelisk form, growing rapidly to extravagant heights. Is much used for screen hedges. Makes a striking feature in any landscape.

Poplar, Northwest—A recent introduction that is proving very popular on account of its extreme hardiness. Particularly adapted to North Dakota, Montana, and Northern Minnesota.

Poplar, Norway—Unexcelled for its quick growth and effect. It outgrows the Cottonwood and is extensively planted where quick groves and windbreaks are desired. This variety is highly recommended by the government to be planted for lumber purposes.

Poplar, Silver—This is a very beautiful ornamental tree. Leaves white as snow beneath, upper surface green. Extremely hardy, especially adapted to dry upland sections.

Poplar, Simoni—Similar to the Balm of Gilead and a very rapid grower. Useful for quick growing windbreaks. It has been planted as far north as Manitoba with entire success.

Poplar, Volga—A new hardy tree from Russia. Of upright growth, similar to the Lombardy, except that leaves are larger and of better form. Branches much stronger. Vigorous and hardy.

Walnut, Black—A majestic tree, growing to great size; bark rough and dark; foliage beautiful. It does well on most soils and is profitable to plant.

WEEPING ORNAMENTAL TREES

Birch, Cut Leaved Weeping—Erect with long drooping branches and very finely cut foliage. One of the most graceful trees for ornamental lawn planting.

Niobe Weeping Willow—A hardy tree with graceful, drooping, golden twigs, very desirable for park or lawn purposes. Well suited to planting anywhere in the northern states.



CATALPA SPECIOSA

Wisconsin Weeping Willow—A very graceful, rapid growing tree. Not considered hardy north of the Twin Cities.

Weeping Mountain Ash—A very novel tree in appearance. The branches have a turning and twisting habit which produces a curious effect.

Weeping Mulberry—One of the most graceful weeping trees known, forming a perfect umbrella-shaped head with long slender branches drooping to the ground parallel to the stem. Has beautiful foliage, rather small, handsomely cut.

NUT TREES

We surely owe it to the coming generations, if not

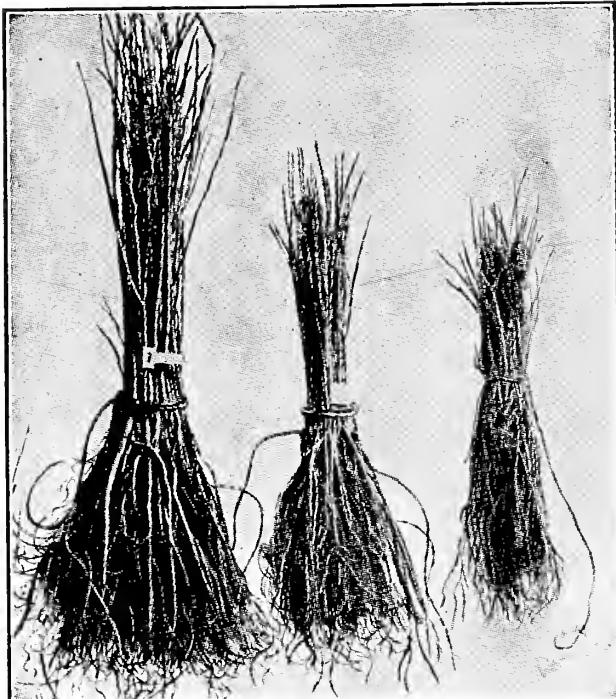
to ourselves, to plant liberally of nut bearing trees. Black Walnut lumber, for instance, is now so scarce that the price is almost prohibitive. What better legacy can you leave your children and grandchildren than a fine grove of Black Walnut? In addition to a lumber value increasing yearly, they will soon be producing a fine crop of nuts regularly.

Black Walnut—A native species of great size and majesty. Bark very dark, deeply furrowed, foliage beautiful, nut round. One of the most prized American lumber. Somewhat slow to start but makes good growth after established.

Butternut—A native tree of medium size, spreading head, reddish colored, dark foliage, very thick. Nut oblong and rough.

Forest Tree Seedlings

Where a large number of trees are to be planted, such as for permanent groves or windbreaks, it is highly advisable to use the seedlings, that is trees not over four to five feet high. They are easier to plant and care for and the cost is but a fraction of what the larger sizes would reach. Before planting a grove or windbreak have ground well enriched and thorough-



FOREST TREE SEEDLINGS

ly worked and dragged smooth as you would for corn. There are many methods of laying out a grove, all of which have their merits, but in general we believe the following to be the one best suited where a large number of seedlings are to be planted.

First mark out your rows the desired distance apart, not less than eight feet, then with a plow run a furrow as deep as possible, throwing the dirt both ways. Next lay the seedlings in the trench with the tops resting on one side, then with one horse, run the plow along the opposite side to throw the dirt back on the roots; next straighten the trees and tramp the dirt firmly around the roots. Follow up on the other side of the trench and tramp again. This will leave very little earth to throw in by hand. The distance apart in the row differs according to the use intended. Willows, where used a snow hedge, should not be set more than three feet apart in the row and cut back within a foot of the ground. For a grove, such trees as Ash, Elm, Box Elder and Maple are best set at least eight feet and joints broken every second row. With the latter trees many plant a Poplar between each tree in the row. They make a rapid growth and protect the slower growing trees when young. As the permanent grove attains a height of ten to fifteen feet the Poplar can be cut out, giving an abundance of firewood. Keep free from grass and weeds by frequent cultivation and a good mulch around the trees will help retain the moisture during the hot weather in summer. All of the varieties listed as seedlings may be had in larger sizes but are not listed under "Shade and Ornamental Trees" to avoid duplication.

Ash, American, White or Green—A native of fine symmetrical outline; valuable for street and park pur-

poses. Thrives best in North and South Dakota and Minnesota.

Box Elder, Ash-Leaved Maple—This species is easily distinguished by the pinnate leaves and greenish-yellow bark. It grows rapidly into a large, spreading tree; found valuable for planting timber claims, shelter belts, etc., in the West, where it endures both drought and cold.

Elm, American, White—This is the noble spreading and drooping tree of our own forests. A fast grower, extremely hardy and in every way desirable for street and park planting. The American Elm is the first choice of the experienced landscape designer.

Elm, Chinese—A hardy and very fast growing tree which will attain windbreak size almost as soon as the Poplars or Willows. Particularly adapted to dry, arid territory.

Maple, Silver or Soft—A magnificent shade and ornamental tree of rapid growth. It is perfectly hardy and will thrive in any soil and in any locality. The leaves are beautifully shaped and have a silvery gleam. The hardiness and ease of culture of this tree makes it one of the most desirable for street and park planting.

Poplar, Canadian—A variety of the Russian Poplar which has proven extremely popular on the western prairies. This tree is especially distinguished from the Carolina type by its light green bark and slightly oblong lobed leaves. The best Poplar for windbreak purposes.

Poplar, Cottonwood—A tall native tree with shiny leaves, attaining a height of 80 to 100 feet. Grows rapidly and is very hardy, thriving under most adverse conditions.

Poplar, Northwest—A recent introduction that is proving very popular on account of its extreme hardiness. Particularly adapted to North Dakota, Montana, and Northern Minnesota.

Poplar, Norway—Unexcelled for its quick growth and effect. It outgrows the Cottonwood and is extensively planted where quick groves and windbreaks are desired. This variety is highly recommended by the government to be planted for lumber purposes.

Willow, Golden Russian—A very showy variety, with golden bark of high color, and very showy in winter. Valuable for windbreaks.

Willow, Laurel—A handsome, close-growing tree, leaves dark, glossy green and highly ornamental. Extensively planted for a windbreak and hedge purposes.

Willow, White—This is the large Willow that has been used so many years for hedges around farms. It does the best in low places.



Be sure to tramp
dirt firmly when
planting and soak
well with water.
Mulching will also
help.

Evergreens

In building a landscape Evergreens may be put to so many uses that they are almost an indispensable factor. For a windbreak or shelter belt there is nothing can equal them and for that purpose two or three rows planted on the North and West around the buildings will, in a short time, be very effective in keeping out the cold winter blasts and preventing the snow from piling up in the yard. Plant them twelve feet apart in the row and the rows twelve feet apart and it is a very good idea to alternate the rows with spruce and pine. The low growing kinds, or dwarfs, may be used about the stone or brick foundation walls; to fill in hard angles or soften heavy corners. Plant them always where they have intimate relation to the activities of the home; where they can be seen and felt. In handling and planting never allow the roots to become dry or exposed to the sun or air. Their sap is resinous and once hardened no amount of moisture will dissolve the resin. Dip the roots in thin mud as soon as unpacked and leave them there until the last minute before setting out. Tramp the earth around the roots as firmly as possible and use plenty of water when planting. Remember Evergreens are always in full leaf and evaporation is constantly going on, and unless firmly established when planted the wind will work them loose, destroy the young root hairs and permit the air to get down to the roots. Cultivate once each week until July first, then mulch heavily with straw, lawn clippings or litter to keep the ground moist and cool during July and August. Never sprinkle the tops of your Evergreens. Evergreens can be transplanted only in the spring. Specimen Evergreens or large sizes are best shipped balled and burlapped. These trees are dug with a large ball of earth without disturbing the roots in the least and the ball securely wrapped with burlap. When shipped this way they are almost sure to grow. When planting balled and burlapped evergreens, do not remove the burlap from the ball until the tree is placed in the hole ready to pack the dirt about them. Use a sharp knife and cut away and remove as much of the burlap as is possible without breaking the ball of the dirt. Plant them 2 inches deeper than they stood in the nursery.

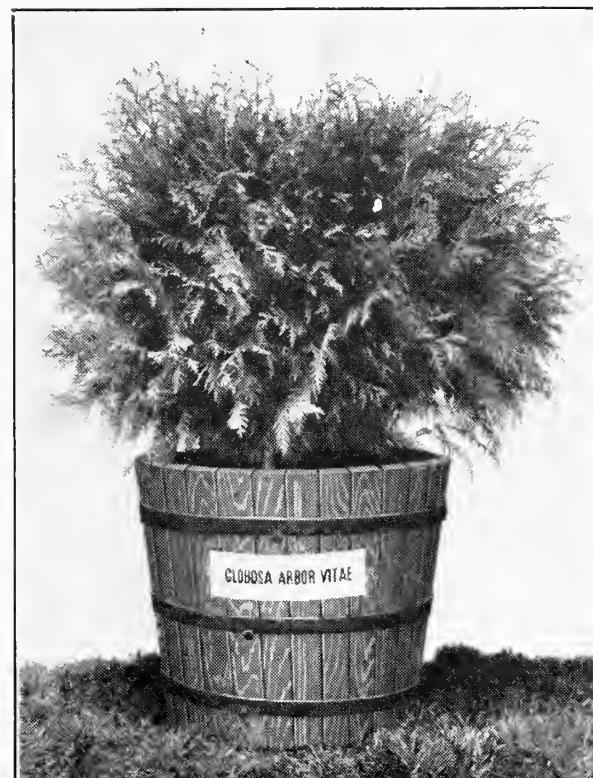
Arbor Vitae, American—The finest evergreen for hedges. It grows rapidly and soon forms a beautiful, dense hedge that is very ornamental. May be trained in any desired shape and stands shearing well.

Arbor Vitae, Compaeta—Dwarf dense little trees with light green foliage, neat and attractive. Useful for beds, borders, cemeteries and low growing hedges.

Arbor Vitae, Globosa—Of dense, dwarf habit globular in outline. Color a pretty light green. Requires no shearing and is always in good form.

Arbor Vitae, Pyramidal—A superb new hardy sort of very compact habit. Grows ten to twelve feet in height and of pyramidal shape. Largely planted in cemeteries where spreading trees would be out of place.

Arbor Vitae, Siberian—Exceedingly hardy and keeps its color well in winter. Growth compact and globular. Makes an elegant lawn tree and can be



and with low growing shrubs.

Pine, Ponderosa—Bull pine. A native of the West. The best tree for dry soils but thrives in most any soil. Resembles the Austrian Pin. Extensively planted for windbreaks.

Pine Scotch—Rapid growing, handsome when young. Often used for windbreaks. Attractive yellow bark. Inclined to raggedness when approaching old age.

Pine, White—The best pine for tall windbreaks. A handsome, graceful, fine-needed American variety with smooth green bark. Very rapid growth. Stands transplanting better than any other pine.

Juniper, Pfitzeriana—One of the most valuable of the spreading Junipers, forming a broad pyramid with horizontal spreading branches, and nodding branchlets. Leaves pointed and spreading, handsome brownish violet.

Juniper, Savin—Being entirely hardy and easy to establish, this is probably the most used among the low growing Junipers. Spreading shrub form with slender branches and dark green leaves. Excellent for foundation work and for underplanting.

Juniper, Virginiana—Tapering and symmetrical with bronze foliage in fall and early winter. Perfectly hardy and recommended where large trees are desired. Grows 25 to 30 feet high.



trained to shape. Foliage dark green above and bluish beneath.

Cedar, Platt River Red—One of the best of Cedar family and thoroughly at home in the landscape. Hardy and needs very little care when once started.

Fir, Balsam—A regular symmetrical tree, assuming the conical form even while young. Leaves dark green above, silvery beneath. Very ornamental.

Fir, Concolor—A very beautiful species with silvery gray bark on the young branches. Leaves long and beautifully silvered, arranged in double rows. Equal in color and beauty to the Colorado Blue Spruce.

Fir Douglas—A Colorado specie of rapid growth. Makes a large symmetrical tree. Foliage bluish-green. Very drought-resistant and may be planted in dry soils where others cannot survive.

Pine, Austrian or Black—Somewhat slow growing but very dense and compact. Foliage long, dark green. Does well on light soils where there is a fair amount of moisture.

Pine, Mugho—The low, regular, dwarf type of Montana, excellent for foundation planting. Hardy anywhere.





COLORADO BLUE SPRUCE

Spruce, Black Hills—Compact, shapely and of deep green color. As the name would imply it is a native of the Black Hills, hence naturally adapted to dry weather and high altitudes. Transplants easily and stands severe climatic conditions.

Spruce, Colorado Blue—Green type. The queen of ornamental evergreens and especially adapted to northern climates. Foliage varies from light silvery green to as deep a shade as the Norway.

Spruce, Colorado Blue—Shiners or Blue type. The same as the green type except in color, which is a rich silvery blue. They are much more rare than the

green type, consequently higher priced but their effect in the landscape is wonderfully striking.

Spruce, Norway—The most popular windbreak evergreen. Stands transplanting well and is a fairly rapid grower. Not as satisfactory for ornamental planting as the Black Hills or Colorado, but perfectly hardy in all northern climates.

Spruce, White—A very hardy evergreen with deep green foliage similar to the Norway. Compact and upright grower. Succeeds best in northern latitudes.



Pyramidal Arbor Vitae Balled and Burlapped

HOW TO PLANT EVERGREENS



BEST IRIS, 75¢ each; \$2 per 10 postpaid, (except where listed otherwise)

A. M. BRANE, Golden bronze standards (S); maroon and yellow falls (F).
ALBERT VICTOR, Tall large solid color soft blue.
xxAMBASSADEUR, Smoky bronze (S); dark velvety maroon (F), 35¢.
C. A. PFEIFFER, Very free; lavender (S), rosy purple (F).
CRIMSON KING, Coppery bronze (S); rich maroon (F).
xxDREAM, Best solid color lilac pink, 35¢.
xxMRS. E. C. SHAW, Tall solid claret, darker (F), 35¢
FAIRY, Tall white with delicate blue shading.
GERTRUDE, Large early solid color violet.
HER MAJESTY, Large rosy pink, veined maroon.
xxIRIS KING, Tall rich yellow with velvety crimson (F), 35¢.
KATHRYN FRYER, Tall yellow with reddish violet (F).
LEOTA, Earliest pure creamy white.
xxL. A. WILLIAMSON, Very large tall violet with velvety purple (F), 35¢.
xxMOLIERE, Largest solid rosy purple, variegated darker, 35¢.
MADAME CHEREAU, Tall white veined and edged lavender.
xxMRS. A. GRAY, Early solid lavender pink, 35¢.
MADAME PACQUITTE, Beautiful solid color rosy claret.
MRS. DARWIN, Pure white, veined lavender.
MITHRAS, Canary (S), reddish violet, bordered yellow (F).
xxOPERA, Large reddish purple (S), rich violet (F), 35¢.
PERFECTION, Tall lavender (S), rich violet (F).
PRINCESS VICTORIA LOUISE, Light yellow S, reddish purple F.
xxPROSPERO, Very tall large bright purple with lavender S, 35¢.
PROSPER LAUGIER, Tall rosy bronze with velvety purple F.
PALLIDA DALMATICA, Solid light blue; tall, large.
QUEEN OF MAY, Tall lavender pink, veined maroon.
RHINE NIXE, Tall light lavender S, rosy purple over white.
RUBELLA, Solid claret over white.
RED GLORY, Bronze S with maroon F, edged yellow.
SHERWIN WRIGHT, Pure bright yellow.
xxxSOUVENIR M. GADISCHAU, Largest solid rich velvety purple, 50¢.
SILVER KING, Large early lavender, fading to white.
SHEKINAH, Creamy white with yellow center.

PUMILLA, (early dwarf) we have in light blue, dark purple, pure yellow, and white.

SIBERIAN, Late bloomers with finer foliage.
" WHITE, blooms are small on tall stems, foliage finer.
" SNOW QUEEN, large pure white.
" SUPERBA, best dark purple.
" DISTINCTION, mottled light blue.

PSEUDO ACORUS, AUREA, Tall thrifty late blooming pure yellow.

BEARDLESS, KERMESIANA, Dwarf claret with white markings.
" LADY GODIVA, Light blue.

50 more choice sorts in stock.

Let us quote you on any stock desired.

SPECIAL - 7 IRIS, all different, our selection, \$1.00 POSTPAID.

STRAND'S NURSERY, TAYLORS FALLS, MINN.



Why Have a *Threadbare* LAWN?

Have a Look at Your Lawn -- Today

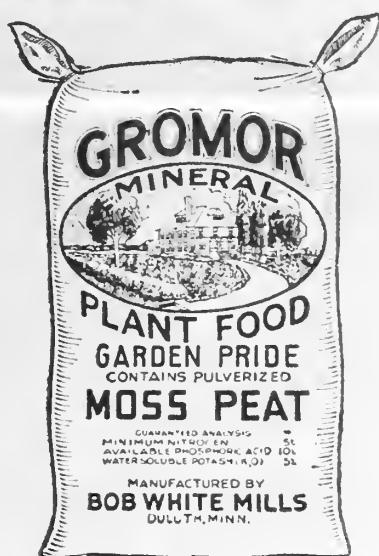
That lawn—grass, shrubs, trees, flowers is the beginning of your home. To the world at large that lawn is—YOU. From its appearance rather than from the house inside, people, other than your friends, form those first impressions which are so slow to change.



Make That Impression Do You Justice

If your lawn is thin or showing bare spots, get busy. You wouldn't tolerate a threadbare carpet. Why have a threadbare lawn? The remedy is surprisingly simple — pleasantly inexpensive.

There's Magic in a Dollar, -- SPENT on



GROMOR GARDEN PRIDE

Here is a mineral fertilizer plant food containing just the elements that grass and all plant life requires, and in the right proportions. In addition it contains a generous share of moss peat, sponge-like vegetable matter whose property it is to hold moisture to help dissolve food elements and to soften the earth so that rootlets can penetrate and absorb the food.

Odorless -- Easily Applied -- Inexpensive

One lawn, run down, ruins the appearance of an entire block. A perfect lawn sets an example that all your neighbors will strive to equal. Make yours the leader and keep it there. Have a look at your lawn—today. Then order GROMOR GARDEN PRIDE from your dealer.

100 lb. bag, \$5.00
50 lb. bag, \$3.00

FULL DIRECTIONS
IN EVERY BAG!

25 lb. bag, \$1.75
5 lb. can, .50

For Sale By

Geo. W.
STRAND'S FINE
ANTIQUES

PRACTICAL SPRAY CALENDAR

The following spray calendar has been carefully worked out to aid you in the care of your nursery stock and if followed will assure you clean, healthy trees and shrubs, free from insect pests and fungus diseases.

CROP	PESTS	WHAT TO USE	DILUTIONS		WHEN TO SPRAY
			Level Tablespoon- fuls to 1 Gallon Water	Pounds to 50 Gallons Water	
APPLE	San-Jose and Oyster-Shell Scales and Blister-Mite	Dry Lime Sulfur	9 to 11	12 to 15	In spring when the leafbuds show tip-green.
	Codling Moth, Curculio, Bud-Moth, Seab, Frog-Eye and Blotch	Dry Lime Sulfur and Arsenate of Lead	2½ to 3 and 1½ to 2¼	4 to 5 and 1 to 1½	1. When the blossom buds show pink. 2. At the fall of the petals. 3. Ten days to two weeks later. 4. Two weeks after No. 3.
	Second-Brood Codling Moth	Arsenate of Lead	1½ to 2¼	1 to 1½	Ten weeks after the fall of the petals. Around Aug. 1.
CHERRY and PLUM	Brown Rot, Leaf-Spot, Curculio and Slug	Dry Lime Sulfur and Arsenate of Lead	2½ to 3 and 1½ to 2¼	4 to 5 and 1 to 1½	1. Just before blooming. 2. When the petals fall. 3. Ten days later. 4. Two weeks after the fall of the petals.
		Dry Lime Sulfur	2½ to 3	4 to 5	Just after picking (when leaf spot bad).
	Cherry Fruit-Fly or Margot	Arsenate of Lead	1½ to 2¼	1 to 1½	As soon as the fruit flies appear. In case of rains make additional applications.
GRAPE	Black-Rot, Mildew and Berry-Moth	Bordeaux Mixture and Arsenate of Lead	1½ to 2½ and 1 to 1½	1 to 1½ and 1 to 2	1. When shoots are 8 to 10 inches long. 2. Just before blooming. 3. Just after the blossoms fall. 4. Two weeks later.
CURRANT and GOOSEBERRY	Mildew	Dry Lime Sulfur	9 to 11	12 to 15	When the buds begin to open.
		Dry Lime Sulfur	2½ to 3	4 to 5	Every ten days after the buds begin to open, making three applications.
	Currant Worm	Arsenate of Lead	1½ to 2¼	1 to 1½	When the worms first appear.
BUSH-FRUTS (BLACKBERRY LOGANBERRY RASPBERRY)	Rose-Scale, Cane-Blight, Leaf-Spot and Anthracnose	Dry Lime Sulfur	9 to 11	12 to 15	In spring before growth starts.
	Anthracnose	Dry Lime Sulfur	2½ to 3	4 to 5	Just before the bloom.
STRAWBERRY	Leaf-Spot, Flea Beetle and Leaf-Roller	Bordeaux Mixture and Arsenate of Lead	1½ to 2½ and 1 to 1½	1 to 1½ and 1 to 2	1. Before the blossoms open. 2. As soon as the fruit has been picked. Additional applications will depend upon the presence of Leaf-Roller larvae and Flea-Beetle.
SHADE-TREES and SHRUBS	Scale insects including Oyster-Shell European Elm	Dry Lime Sulfur	9 to 11	12 to 15	In spring before the buds open.
	Cottony-Maple Tulip Pine-Leaf and Terrapin Scales	Miscible Oil	Directions	on container	In spring before buds open.
	Tussock Moth	Arsenate of Lead	4½	3	As soon as the caterpillars appear.
	Brown Tail Moth	Arsenate of Lead	4½	3	Spray at the time pear blossoms are falling and in August. Burn the winter nests.
	Gypsy Moth	Arsenate of Lead	4½	3	Spray when the caterpillars first appear.
FLOWERS	Leaf-eating insects	Arsenate of Lead	1½ to 2¼	1 to 1½	As soon as the slugs or worms appear.

NOTE 1: Whenever aphis (plant lice) appear on fruit trees, vegetables, shade trees, shrubs and flowers, spray with Nicotine Sulfate at the rate of 1 level tablespoonful to 1 gallon of water or ½ pint to 50 gallons of water.

NOTE 2: This spray program is made primarily for growers in regions where climate conditions are similar to those in Minnesota.

NOTE 3: Ingredients and instructions for Bordeaux Mixture can be obtained at any drug store.

DON'T fail to have your ground ready before goods arrive.
DON'T fail to plant on same day you receive the goods, if possible.
DON'T fail to cut the end off of each root with a sharp knife before planting.
DON'T fail to plant deep and solid.
DON'T fail to thoroughly soak ground around each plant and tree after planting.
DON'T fail to trim each fruit tree, leaving but two buds on the last year's growth of each limb, and

leave only about five branches on a tree.
DON'T trim your tree too high as low branches will protect the body of the tree.
DON'T fail to cut back all shrubs after planting, to within ten inches of the ground.
DON'T fail to spray your trees as per instructions on this sheet.
DON'T fail to cultivate your young stock thoroughly regularly until July 15, each year, until thoroughly established and mulch well during late summer.

It's Not a Home Until It's Planted



Tartarian Honeysuckle



New Varieties

We are continually adding new varieties to our line and can usually supply anything hardy in this section. Should you fail to find what you want listed please write us and we will be glad to advise you fully.